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T. Lucretius Carus,
OF THE
NATURE OF THINGS.

Translated into English Verse by
Thomas Creech, A. M. and
Fellow of *Wadham* College
in OXFORD.

VOLUME II.

Containing the Fifth and Sixth Books:
Explain'd and Illustrated with Notes
and Animadversions.

*Felix qui potuit rerum cognoscere causas,
Atque metus omnes, & inexorabile Fatum
Subjecit pedibus, strepitumque Acherontis avari.*

Virg.

L O N D O N :

Printed by JOHN MATTHEWS, for GEORGE
SAWBIDGE, at the *Three Fleurs de Lys* in
Little Britain. MDCCXIV.



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VOLUME II.

Containing the Fifth and Sixth Books.
Explained and Illustrated with Notes
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Subject matter, the same as the first
Volume, but the notes are
more extensive and the
animadversions are more
copious.

L O N D O N :

Printed by John Matthews, for George
Sawbridge, at the Town Head in
St. Dunstons Church-yard.





THE PREFACE.



HAVING in the Preface to the first Volume given the Publick so full and ample an Account of my Design, in publishing these Notes and Animadversions on this English Translation of Lucretius, as likewise of the Helps I made use of, and of the Method I have observ'd, in this Undertaking, which I take to be the chief Business of a Prefacer, I shall not long detain my Reader by Way of Introduction to this second Volume, that contains only the two last Books of my Authour; who, having in these two Books treated of a great Variety of noble Subjects, has afforded me a just Occasion of swelling this Volume to almost an equal Number of Sheets with the former, tho' computing the Number of Verses, it contain but little more than one Third of the whole Poem of Lucretius: The Length however, if I may judge of the Readers Satisfaction in the Perusal, by my own in the compiling, will not, I hope, seem tedious to him; and I flatter my self, that I shall not weary and grow irksome to those, whom it has been my principal Study and Design at once to instruct and divert.

The P R E F A C E.

When the Subject of which my Authour was treating was naturally crabbed and abstruse, as in the two first Books, in which he disputes chiefly of the Nature and Properties of his Atoms; I thought it not convenient to dwell too long upon it; but endeavour'd only to render it plain and intelligible with as much Brevity as the Province of an Interpreter, which I had undertaken, would allow: But when he came to treat of Things which I judg'd would be more entertaining, as of the Origine of the World; of the Motion of the Heavens; of the Sun, Moon and Stars; of the first Men, and of their Manners and Way of Life; of the first Institution of Kings, Magistrates and Laws; of the first Invention of Arts and Sciences; of the Things we call Meteors, as Thunder, Lightning, Whirlwinds, Earthquakes, &c. Of the Causes of Rain, Wind, Hail, Snow, and Frost; Of the Flames that are ejected from the Bowels of Mount Aetna; Of the annual Increase of the River Nile; Of the Averni; Of certain miraculous Fountains; Of the Loadstone; and of the Cause and Origine of Plagues and Diseases; Of all which, as well as of many other Subjects of the like Nature, Lucretius has disputed in these two last Books; when he came, I say, to treat of these Matters, he afforded me a wider Field to enlarge and expatiate upon; and I have laid hold of the Opportunity he gave me, to illustrate all those several Subjects, with the Opinions of all the most celebrated, as well antient as modern, Philosophers, concerning them: In which I presume I shall not be deem'd to have transgress'd the Bounds, which were formerly prescrib'd to an Interpreter, who, as Ammonius allows, *Neque benevolentia ductus conari debet, quæ perperam dicuntur consentanea facere, eaque veluti à tripode excipere, neque rectè prodita pravo sensu per odium carpere; sed eorum esse incorruptus iudex, atque auctoris sensum aperire imprimis, illiusque placita interpretari; tum quod alij, & ipse sentiat afferre.* Besides; I can not apprehend, but that it will be acceptable to the Publick to see at one View the different Opinions of the Learned Men in all Ages, on the above Subjects; and this is what I have endeavour'd

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deavour'd to oblige my Readers with in the following Sheets.

I will conclude this Preface with a few Lines in my own Vindication, and then take my Leave.

I foresee that I have render'd my self liable to be carp'd at, and that I shall be censur'd by some Criticks, on Account of some particular Words, and certain Ways of Expression, which I have constantly observ'd and made use of, through the whole Course of this Work; contrary to the generally receiv'd Custom and Practise of many, nay perhaps of most, of our present Writers.

I need not be told, that, in Matter of Speech, when Custom has once prevail'd, we are absolutely oblig'd to submit to whatever it has impos'd upon us; and that it is not lawful, on any Pretence whatsoever, to resist the Laws of that Sovereign, I had almost said Tyrant of Languages,

Cui penes arbitrium est & jus & norma loquendi.

Horat.

But on the other Hand, in Language, as in most Things else, there is a good Custom and a bad; The good ought to be the Standard of Propriety and Correctness of Speech; and the bad ought carefully to be avoided, as the Corrupter of it: so that the main Difficulty lies in discerning rightly between them: But how this may be done is not our present Business to inquire.

Dr. Swift, in his Letter to the Lord High Treasurer, with good reason complains, That our Language is extreamly imperfect, that its daily Improvements are by no Means in proportion to its daily Corruptions, and that the Pretenders to polish and refine it have chiefly multiply'd Abuses and Absurdities; and so far he is certainly in the right: but I can not agree with him when he goes on, and says, That in many Instances it offends against every Part of Grammar: He seems to impute to the Language itself the Faults of our uncorrect Writers. All Languages, but more especially

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especially the modern, and ours among the rest, have certain Idioms and Proprieties of Speech peculiar to each of them, in which nevertheless they offend against the general Rules of Grammar: Of this so many Instances might be given, that it is needless to give any.

Modern and living Languages are not to be fix'd by the Standard, nor ascertain'd by the Maxims and Rules of the antient and the dead; and their chief Beauties consist in frequent Emancipations from the servile Laws of antient Grammar. A Man may write ungrammatically, and yet write very good English; according to this excellent Saying of Quintilian, *Aliud est grammaticè, aliud Latinè loqui.*

I now return to what gave Occasion to these Reflections, and, among several other Instances that my Readers may observe, will mention only one or two, in which I have vary'd from some other Writers of these Days. Phenomenon is a Word that has been introduc'd into our Language: Necessity brought it in to avoid a Circumlocution: For it is originally Greek, and signifies an Appearance in the Heaven, or in the Air. Now some, instead of Phenomenon, leaving out the two final Letters, make it Phenomen, and say in the Plural, Phenomens; both which I take to be altogether absurd: Others, who write Phenomenon in the singular Number, when they have Occasion to use it in the Plural, say Phenomena, which, in my Opinion, is contrary to the Analogy of our Language; and others again, in the same Number, Phenomena's, which I almost dare pronounce to be a Monster in Speech: For my own Part, whenever I have been oblig'd to use it in the Plural, I have not stuck to say, Phenomenons, rather than Phenomena, as it is in the Original: and this I am sure is more conformable to the Analogy of our Language, in which the Difference between the Singular and the Plural Number, even in the Words borrow'd from the learned Languages, consists not in any Variation of the final Syllable, but in the Addition of the Letter s to the singular Number. Thus in the following Words, Idea, Anathema, Chimera,
Com-

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Compendium, Epithalamium, which, together with many other, we have taken from the learned Languages, and naturaliz'd in our own, we say not in the Plural, Ideæ, Anathemata, Chimeræ, Compendia, Epithalamia, even tho' we have retain'd their original Terminations in the Singular, but Ideas, Anathemas, Chimeras, Compendiums, Epithalamiums. Besides; Since there is no Method yet propos'd, nor any Rules yet agreed upon, and settled among us, for the ascertaining and fixing of our Language for ever, why has not every Man an equal Share of Liberty, not only to introduce and set up a new Word, if there be Occasion for it, but even to use one that is already introduc'd, in a different manner from the rest of his contemporary Writers, especially since they themselves use it differently from one another? Licuit, semperque licebit. This, I hope, is sufficient to excuse, if not to justify, my having us'd the Word Phenomenons in the plural Number: at least it will make it appear to be an Errour, not of Ignorance, but of Judgment, and which I declare my self always ready to recant and rectify, whenever I can be better inform'd, and convinc'd by good Reasons that I am in the wrong.

Again: Nothing is more frequent with our present Writers than the following Way of Expression: They greedily embrace that Doctrine, be it never so erroneous. This Example is taken from one of our most celebrated Authours for Correctness of Style; nevertheless I take the Word never in that place to be a Barbarism in Speech: It ought to be ever; be it ever so erroneous: This Way of Expression is an Idiom of our Language; partly elliptick, partly a transposition of the Words; which, when plac'd in due Order, and without any Word understood, will run as follows; How erroneous soever it be. I have not Room in this Place to undertake the Disquisition of this Doubt, nor to give my Reasons at large, why, whenever I have had Occasion to make Use of the like Expression, I have dissented from most of our other Writers, and employ'd the Word ever, rather than never: But this, together

THE PREFACE.

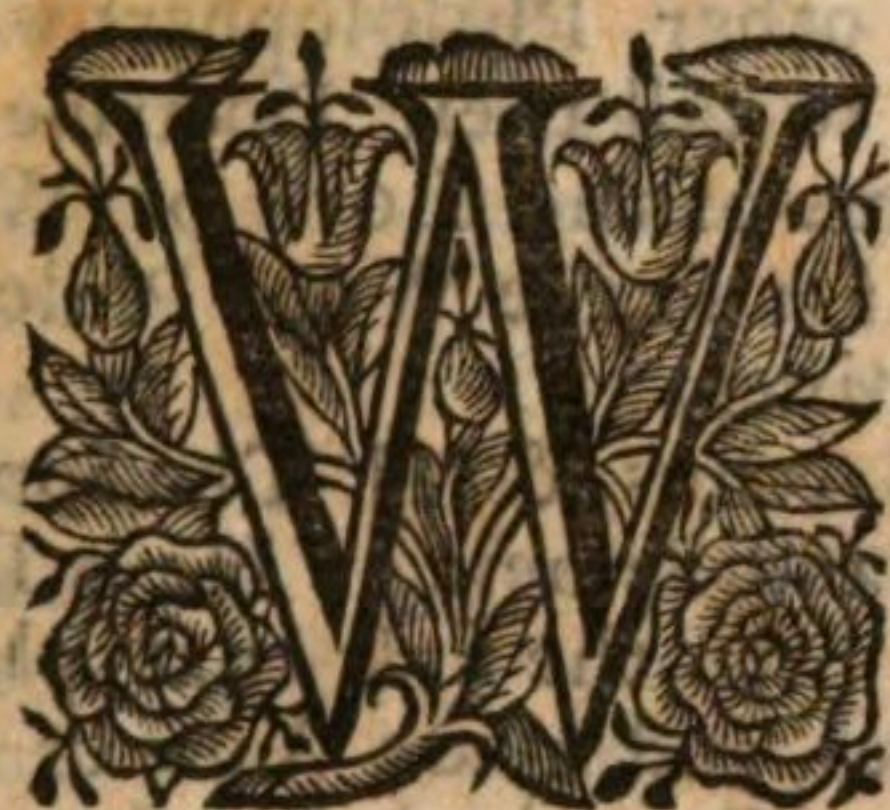
together with some Hundreds of Observations, relating to our native Language, and which I have been many Years digesting in my Thoughts, I intend to publish in a short time, as an Essay towards the correcting, improving, and ascertaining of it, under this Title, REMARKS upon the ENGLISH TONGUE.



T. LUCRE-



T. LUCRETIVS CARUS.



HAT VERSE can soar on so sublime
 a Wing,
 As reaches HIS Deserts? What MUSE
 can sing,
 As HE requires? What Poet now
 can raise
 A stately Monument of lasting Praise,
 5 Great as HIS vast Deserts, who first did show
 These useful Truths; who taught us first to know
 NATURE'S great Pow'rs? 'Tis more than Man can do!
 For, if we view the mighty Things HE show'd,
 His useful Truths proclaim, HE WAS A GOD!
 10 HE WAS A GOD, who first reform'd our Souls,
 And led us by PHILOSOPHY and Rules,

From

NOTES.

Lucretius begins this Book with the Praise of Epicurus, and not only makes him equal to the Gods, but even proclaims him a God; because, says he, his Divine Discoveries have been more beneficial to Mankind, than the Inventions of Ceres, or of Bacchus, or than the many glorious Exploits of Hercules: since Men might have liv'd happily enough without them. But true Wisdom, which Epicurus first discover'd and taught, is of the greatest Utility to Mankind, because it chaces away all Uneasi-

ness from the Mind, and instructs us aright in the Nature of all Things, and concerning the immortal Gods.

10. Who first, &c.] Lactantius, lib. 3. cap. 14. de falsâ Sapientiâ: and many others, pretend from this Expression of Lucretius, that he did not mean Epicurus, but one of the more antient Philosophers, as Pythagoras, or Socrates, or Thales, or some other of the seven Sages: But they are evidently mistaken, as appears by v. 60. of this Book, where he says,

From CARES, and FEARS, and melancholy NIGHT,
To JOY, to PEACE, to EASE; and shew'd us LIGHT.

For now compare what other GODS bestow:

15 Kind BACCHUS first the pleasing Vine did show;
And CERES, Corn; and taught us how to plough.

}
}
Yet

NOTES.

Cujus ego ingressus vestigia——

His Steps I trace——

And Cicero certainly had his Thoughts on this Passage, when in Tuscul. 4. he says: Quæ quidem cogitans soleo sæpe mirari nonnullorum insolentiam Philosophorum, qui Naturæ cognitionem admirantur, ejusque Inventori & Principi gratias exultantes agunt, eumque venerantur ut Deum; liberatos enim se per eos dicunt gravissimis Dominis. When I reflect on these Things, I often wonder at the Insolence of some Philosophers, who admire the Knowledge of Nature, and give Thanks with Transport of Mind to the Inventour and first Authour of Natural Philosophy; owning that he has delivered them from most Tyrannous Lords. Thus our grateful Poet confesses to whom he owes his Knowledge in the Nature of Things: And indeed, if Epicurus did deliver the Minds of Men from Cares, and Fears, and Superstition, he justly deserv'd to be rever'd preferably to any of the Heathen Gods. The Words of this Passage run thus in the Original,

Qui primus vitæ rationem invenit eam, quæ
Nunc appellatur Sapientia——

For WISDOM was the Name which the Epicureans, who were a sort of Men not burden'd with too much Modesty, gave only to

their own Philosophy. Horat. Lib. 1. Od. 33.

Parcus Deorum cultor, & infrequens
Insanientis dum sapientiæ
Consultus erro.——

But the other Philosophers were content to call their Doctrine by the Name of the Love of Wisdom: for so the Word Philosophy signifies.

15. Bacchus, &c.] The Son of Jupiter and Semele: He is said to have been the first that planted Vines, and made Wine of the Grapes: For which Reason the Poets made him the God of Wine: He travel'd over the whole Earth, conquer'd the Indies, and was the first who triumph'd; which he did, riding upon an Elephant. The chief Badges and Emblems of his Power were Tygres and the Thyrsus: The Tygres were harness'd to his Car; and thus he was wont to be carry'd about: Virg. Æneid. 6. v. 804.

Nec qui pampineis victor juga
flectit habenis,
Liber, agens celso Nisæ de vertice tigres.

Nor Bacchus, turning from his
Indian War,
By Tygers drawn, triumphant
in his Car,
From Nisæ's Top descending to
the Plains,
With curling Vines around his
purple Reins.

The

The Thyrsus, was a Spear or Javelin, wrapp'd about with Vine-Branches and Ivy; whose Point ended in the Shape of a Cone: Bacchus, and the mad drunken Women, his Companions, who were call'd Bacchæ, always carry'd a Thyrsus in their Hands: Moreover, Lucretius, in this Place, calls Bacchus by the Name of Liber:

Namque Ceres fertur fruges, Liberque liquoris
Vitigeni laticem mortalibus instituisse.

Virg. Georg. I. v. 5.

— Vos, O clarissima mundi
Lumina, labentem cœlo quæ ducitis annum,
Liber & alma Ceres; vestro si munere tellus
Chaoniam pingui glandem mutavit aristâ,
Poculaque inventis Acheloia miscuit uvis.

Upon which the Interpreters say, that the Poet calls Liber and Ceres the Lights of the World, either because they were esteem'd to be the Inventours of, and to preside over, the Harvest and the Vintage, which are the chief Parts or Seasons of the Year, and the chief Ornaments of the World, since they supply Mankind with Meat and Drink: or, because by them he means the Sun and Moon. And indeed Prætextatus, in Macrobius Saturnal. lib. I. cap. 18. evidently proves, that not only Liber and Dionysius, which is another of the Names of Bacchus; but that Jupiter, and Mars, and Mercury, and Hercules too, were the Sun; who was call'd Liber, says he, quod liberè vagetur. He adds likewise, that Ceres was the Moon, and that some derive

her Name à creando, because she conduces very much to the Production of Things. Bacchus was call'd Liber, either because he made free, and restor'd to Liberty the Country of Bœocia, where he was born, as we learn from Plut. in Quæst. Cent. or because Wine delivers the Mind from Cares, inspires with Courage, and occasions a Liberty or Freeness of Speech. Thus Horace, Carm. Lib. 3. Od. 21. speaking to a Cask of Wine:

Tu lene tormentum ingenio ad-
moves
Plerumque duro: tu sapientium
Curas, & arcanum jocofo
Consilium retegis Lyao.
Tu spem reducis mentibus anx-
is,
Viresque: & addis cornua pau-
peri,
Post te neque iratos trementi
Regum apices, neque militum
arma.

Of Bacchus see more, Book II. v. 616. and Book IV. v. 1165.

16. Ceres] She was Daughter of Saturn and Ops, and Mother of Proserpine. She was believ'd to be the first that sow'd Corn, and found out the Art of Using it. Virgil, Georgick I. v. 147.

Prima Ceres ferro mortales vertere terram
Instituit.

For which Reason they made her the Goddess of Corn; and hence too, as Varro, Cicero, and Arnobius witness, she was call'd Ceres, as it were, Geres, because, to use the very Words of Arnobius, lib. 3. Salutarium seminum fruges gerat. See more, B. II. v. 616. and B. IV. v. 1165.

18. As

Yet Men might still have liv'd without these two:

They might have liv'd as other Nations do.

But what Content could Man, what Pleasure find,

20 What Joy in Life, while Passions vex'd the Mind?

Therefore that MAN is more a God than these,

That MAN, who shew'd us how to live at Ease,

That MAN, who taught the World Delight and Peace.

His useful Benefits are rais'd above

25 *ALCIBIDES* Acts, the greatest SON of *Jove*!

For

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18. As other Nations do.] *Di-
odorus Siculus*, Book III. says,
That the Inhabitants on the
Coast of the Gulph of Arabia;
and of the Countreys of *Troglo-
dytia* and South Ethiopia, know
not the Use of Corn or Wine;
but that some of them live upon
Fish and Snails, others upon
Roots, others upon the Leaves,
Seeds, and Fruits of Trees, and
others upon Locusts. *Mela* wit-
nesses, that the *Troglodytes* live
in Dens, and feed upon Serpents:
some of which, says *Pliny*, *Nat.
Hist. lib. 31. cap. 2.* are twenty
Cubits in Length. And *Faber*,
in his Note on this Passage of
our Authour, says, that scarce
the sixth Part of Mankind do
yet know what Wheat is. There-
fore we may well, says *Lucretius*,
live without Corn and Wine,
but not without Wisdom: *Sa-
pientia enim*, says *Cicero*, *lib. 1.
de Fin. est una quæ mœstitiam
pellat ex animis, quæ nos exhor-
rescere metu non sinat, quâ præ-
ceptrice in tranquillitate vivi po-
test, omnium cupiditatum ardo-
re restincto*: For Wisdom only
it is that drives away Sorrow and
Uneasiness from the Mind, that
suffers us not to stand aghast
with Fear; and by whose Ad-
vice we may extinguish the
Flame of all inordinate Desires,
and lead our Lives in Tranquilli-
ty, and exempt from all manner
of Passion.

19. But what Content, &c.]
Lucretius:

*At bene non poterat sine puro
pectore vivi.*

Where by *puro pectore* the Poet
means a Mind undisturb'd by
Ignorance, and not obnoxious to
Errours; a Heart sincere, and
free from all Anxiety: for, as
Horace says,

*Sincerum est nisi vas, quodcun-
que infundis, acescit.*

In like manner, without Sincere-
rity of Heart and Purity of
Mind, 'tis impossible to lead a
happy Life, or to pass our Days
in Tranquillity: And *Cicero*
teaches us, that the only way to
acquire this Purity of Mind is
by the Help of Wisdom, which,
by delivering us from all Ter-
rours and Desires, and from the
Temerity of all false Opinions,
is the surest Guide to Pleasure.
*Mentem autem puram ut habeas,
adhibenda est sapientia, quæ, &
terroribus cupiditatibusque de-
tractis, & omnium falsarum o-
pinionum temeritate direptâ, cer-
tissimam se nobis ducem præbeat
ad voluptatem. 1. de Fin.*

24. His useful, &c.] In these
24. v. the Poet enumerates some
of the Labours of *Hercules*, which,
he tells us, fall as far short of the
Discoveries of Wisdom, made by
Epicurus, as the Soul is more ex-
cellent

For tell me, how the fierce NEMÆAN Roar
 Could fright us now? How could th' ARCADIAN Boar,
 The CRETAN Bull, the Plague of LERNE's Lakes,
 The poy's'nous HYDRA with her num'rous Snakes?

How

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cellent than the Body: For Hercules did indeed deliver Men from Monsters, that were destructive to the Body; but Epicurus, who first instructed Men in the Art of Wisdom, delivered their Minds from all vain Anxieties, and restless Desires: He chac'd from our Souls the Terrors at which we were startled and stood aghast; and dissipated the Darkness of Errours, which clouded the Happiness of Life.

25. Alcides] Hercules; He was call'd Alcides from his Grandfather Alcæus, who was Father of Amphytrio of Thebes: For Hercules was the Son of Jupiter, by Alcmena the Wife of Amphytrio. Now before either Hercules, or Eurystheus, King of Mycenæ, were born, Juno, who knew that the Fates had decreed, that whether of them came into the World last, should serve the other, contriv'd the Matter so, that Hercules was born after Eurystheus, who, at her Instigation, commanded Hercules to go upon many dangerous Exploits; but he prov'd successful in all of them, therefore was call'd Hercules, from *Ἥρα*, Juno, and *κλέος*, Glory, because she was the Cause of all his Renown, tho' fore against her Will. Virgil. *Æn.* 8. v. 291.

ut duros mille labores
 Rege sub Eurystheo, fatis Juno-
 nis iniquæ
 Pertulerit.

26. Nemæan Roar, &c.] That is the Nemæan Lion. Nemæus magnus hiatus leonis, says Lucretius. This is the fifth of the

Labours of Hercules, according to the Order in which the chief of them, which are thirty four in Number, are enumerated. Now there haunted in the Nemæan Wood, near Cleone, a City of Achaia, in the Countrey of Peloponnesus, a vast and terrible Lion, that did a World of Mischief: Hercules, not being able to kill him either with his Club, or with his Darts, laid hold of him, and tore him to pieces with his Nails; then took his Skin, which neither Stone nor Iron could penetrate, and wore it on his Shoulders, as a Badge of Honour, Diod. Sicul. lib. 3. Plaut. in *Perf.* Virg. *Æn.* 8. This gave Occasion to the Institution of the Nemæan Games, which were celebrated every third Year in Honour of Hercules. But some, particularly Statius, will have this Solemnity to have been first instituted to celebrate the Funeral of Opheltes, Son of Lycurgus, and who was kill'd by an Adder.

27. Th' Arcadian Boar,] This was his seventh Labour: for Lucretius does not observe the Order: and mentions only the chief of them. He speaks here of the dreadful Boar that haunted upon the Mountain Erymanthus in Arcadia, and laid waste all the Countrey round. Hercules took him, and carry'd him to Eurystheus, King of Mycenæ.

28. The Cretan Bull,] This was his ninth Labour. A Bull that infested the Country about Crete: Hercules brought him alive likewise to Eurystheus. Some say this Bull was sent into Crete by Neptune, whom Minos King

30 How could GERTON's Force, or triple Face?
 How DIOMED's fiery HORSE, those Plagues of THRACE?
 How could the BIRDS, that o'er th' ARCADIAN Plains
 With crooked Talons tore th' affrighted Swains,
 Offend us here? Whom had the SERPENT struck,
 35 Mighty in Bulk, and terrible in Look,

That

NOTES.

King of Crete had offended: others, that it was the same Bull which brought Europa, the Mother of Minos, into Crete: and others, that it was the Bull, for Love of which, Pasiphae, the Wife of Minos, run mad.

The Plague of Lerne's Lakes,] This was his third Labour. It was a Serpent that liv'd both upon Land and in the Water, and was call'd Hydra, from ὕδωρ, Water: It kept for the most part in the Lake Lerna, between Mycenæ and Argos: and was dreadful for having seven Heads; nay, Virgil says, fifty, if, as many believe, it be the same Hydra that Æneas saw when he descended into Hell;

Quinquaginta atris immanis hiatibus Hydra

Savior intus habet sedem.—

Æn. 6. v. 576.

and others an hundred; and no sooner was one of them cut off, than two sprouted out in its Place: but Hercules kill'd him at length, by searing the Wounds, as fast as he cut off each of his Heads.

30. Geryon] This was the sixteenth Labour of Hercules. Geryon, was a King of Spain, said to have three Bodies, either because he govern'd three Islands of Spain, the greater and lesser Balears, now call'd Majorca and Minorca; and Ebusus, now Ivisca; or because he and his two Brothers, who were united in the strictest Ties of Friendship, were all slain by Hercules, who took

away their Herds of Cattle, and brought them into Italy, Pausan. lib. 1. and Diodor. lib. 4. Virg. Æn. 8. v. 201.

—Nam maximus ultor,
 Tergemini nece Geryonis, spoliisque superbus,
 Alcides aderat; Taurosque hac victor agebat
 Ingentes; vallemque boves amnemque tenebant.

31. Diomed's fiery Horse,] This was the sixth Labour. Diomedes was a King of Thrace, who, to make his Horses the more fierce and wild, fed them, as the above-cited Diodorus says, not with Oats and Barley, but with human Flesh: Hercules took him, and gave him to his own Horses to eat.

32. The Birds, &c.] This was the eighth Labour. These Birds were call'd Stymphalides, from Stymphalus, the Name of a Town, Mountain, and Lake in Arcadia; where these Birds haunted: they were of the Size of Cranes; in Shape like the Bird call'd Ibis, which we generally interpret a Snipe, and had Beaks so hard, that they would enter into Iron: These Hercules kill'd with his Darts, as Pausanias and Catullus testify; But Diodorus Siculus, lib. 4. says, he frighted them out of the Countrey with a great Brass Rattle.

34. The Serpent, &c.] The fourteenth Labour. Hesperus, the Brother of Atlas had three Daughters, Ægle, Arethusa and Hesperethusa, who are said to have

That, arm'd with Scales, and in a dreadful Fold,
Twin'd round the Tree, and watch'd the growing Gold?
Remov'd as far as the ATLANTICK Shore,

De-

N O T E S.

have had Gardens planted with Trees that bore golden Fruit. These Gardens were guarded by a vigilant Dragon, whom Hercules slew, by the Command of Eurystheus, and took away the Apples. Besides the Dragon, Virgil adds a Priestess, and a Temple, perhaps of Venus, to whom the Apples were consecrated.

Hinc mihi Massylæ gentis monstrata Sacerdos,
Hesperidum templi custos, epulasque draconi
Quæ dabat, & sacros servabat in arbore ramos.

Æneid. 4. v. 483.

And the same Poet, according to the common Opinion, describes the Situation of the Gardens to be in the Mauritania Tingitana, now the Kingdoms of Fez and Morocco, about the Town of Lixa, in the extreamest Western Part of Africa: According to some, they were in the Continent; according to others, in an Island. Others place these Gardens of the Hesperides in the quite opposite Parts of Africa, that is to say, in the very East of Africa, and on the Eastern Shore of the Syrtes Major, near Cyrenaica: but this Errour is fully confuted by Salmasius to Solinus. Moreover, some will have it, that the Apples of these Gardens were only Sheep, whose Fleeces were very valuable, and which the Greeks call μήλα, as well as they do Mala, Apples. Others believe them to have been what we call Citrons, or Lemons, and that Hercules first brought them from thence into Greece: They likewise believe the Gar-

dens to have been the Fortunate Islands, now the Canaries: which lie below Lixus indeed, but very near to Mount Atlas, and not far from the Shore. Lastly, others will have them to be the Islands, which the Antients call'd Hesperides, and Gorgades, or Gorgones, now the Islands of Cape Verd: but these lie more to the South, at a great Distance from Atlas, towards the Mouths of the River Niger, and at least an hundred and fifty Leagues distant from them. And these last believe the Dragon to be the tortuous Sea, that divided the Gardens from the Continent. Milton, describing the Garden of Eden, gives it Trees

—Whose Fruit, burnish'd
with Golden Rind,
Hung amiable: Hesperian Fables true;
If true, here only, and of delicious Taste.

38. Atlantick Shore,] The West of Mauritania, which is wash'd by the Atlantick Ocean, so call'd from Mount Atlas, which, under several Names, extends itself even to Egypt, and dividing all Africa into North and South, that is to say, Mauritania from the inner Lybia, ends in the Western Ocean. For which Reason the antient Poets comprehended all the People, that lay to the South of Atlas, under the Name of Æthiopians, and distinguish'd them by Oriental and Occidental. The Spaniards call all this Extent of Mountains, Montes claros. Atlas, Brother of Prometheus, Son of Japetus, and King of Mauritania

Desarts untrod by us, and by the Moor.
 40 Those others too that fell, and rais'd his Fame,
 That gave him this diffus'd and lasting Name,
 And made him rise a God from OETA's Flame:

Had

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nia, being admonish'd by Themis, that he was in Danger of being kill'd by a certain Son of Jupiter, would, for that Reason, receive no Stranger into his House: and having deny'd the Rights of Hospitality to Perseus, the Son of Jupiter by Danae, Daughter of Acrisius King of the Argives, this Perseus, by shewing him Medusa's Head, chang'd him into this Mountain, which bears his Name: This Fable is related at large by Ovid, *Metam.* 4. v. 621. & seq. Now Atlas was very skilful in Astrology, which gave Occasion to the Fiction of supporting Heaven on his Shoulders. And Virgil describes the Mountain as still retaining the Figure of a Man, *Æneid.* 4. v. 246. where speaking of Mercury, he says,

— Jamque volans apicem &
 latera ardua cernit
 Atlantis duri, coelum qui vertice
 fulcit:
 Atlantis, cinctum assidue cui nubibus atris
 Piniferum caput & vento pulsatur & imbri:
 Nix humeros infusa tegit: tum
 flumina mento
 Præcipitant senis, & glacie riget
 horrida barba.

Thus translated by Dryden.

— And flying thence he spies
 Atlas, whose brawny Back supports the Skies:
 Atlas, whose Head, with piny Forests crown'd,
 Is beaten by the Winds, with foggy Vapours bound.

Snows hide his Shoulders; from
 beneath his Chin

The Founts of rousing Streams
 their Race begin:

A Beard of Ice on his large
 Breast depends.

39. Desarts untrod by Us, and
 by the Moor.]

Quo neque noster adit quisquam,
 nec barbarus audet. Lucret.

i. e. Whither none of us Romans go, nor any Foreigner dares to go: For the Antients, as well Greeks as Latines, call'd all that were not of their own Countrey Barbarians: But I think our Translatour can hardly justify this Expression, untrod by the Moor, since the Moors are the People that inhabit the Countrey of which Lucretius is speaking. Be that as it will, Cicero asserts for certain, that even in his Days there was no Sailing practis'd any farther than from the Mouths of the Euxine Sea, to the Columns of Hercules: i. e. than Abyla, now Ceuta, on the African Coast, and Calpe, now Gibraltar, on the Coast of Spain. For Hercules, after he had laid waste the Garden of the Hesperides, fix'd two Pillars on the Mountains Abyla and Calpe, as the Bounds of his Travels: which two Mountains were before contiguous; but he is said to have parted them, and by that Means letting in the Ocean, to have open'd the Sea of Cadiz, now call'd the Straits of Gibraltar.

40. Those others too, &c.]
 For many other notable Exploits
 are

Had they still liv'd, what Mischief had they done?

Whom had they torn? Whom frighted? Surely none:

45 For now, ev'n now, vast Troops of MONSTERS fill
Each thick, and darksome Wood, and shady Hill:

Yet who complains, yet who their Jaws endure?

For Men may shun their Dens, and live secure.

But had not HIS PHILOSOPHY began,

50 (What had not Man endur'd, ungrateful Man?)

And cleans'd our Souls, what Civil Wars, what Cares

Would fierce Ambition raise, what pungent Fears?

How Pride, Lust, Envy, Sloth, would vex the Mind?

There-

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are recorded of Hercules. He kill'd Busyris, the Son of Neptune and Libya, an Egyptian Tyrant, of such incredible Strength, that he could draw an Ox about at his Pleasure, and who, as well as Diomedes of Thrace, fed his Horses with human Flesh: And Antæus, the Son of Neptune and Terra, a Giant sixty four Cubits high; who, as often as he was faint or weary, if he but touch'd the Earth, recover'd his full Strength again: And Augeas, the King of Elis, who refus'd to give him what he had agreed for cleansing his Stables of the Filth they had gather'd in thirty Years: And Eryx, the Son of Venus, with whom he fought at the Cœstus, or Hurl-bats: Besides, he slew several of the Centaurs, &c. and was of signal Service to the Gods, in their Wars with the Giants, who durst attack their Heaven; for the Earth had pronounc'd an Oracle, at Phlægra, a Town in Thrace, and the Place of the Battel, That the Giants could not be destroy'd, without the Help of two Heroes or Demi-Gods: Upon which the Gods made Choice of Hercules and Bacchus; and by their Assistance got the Victory: Thus Apollodorus: And hence we see the Vainness of the Fables, in

teaching that the same Hercules, who flourish'd about the Age of Theseus and Eurystheus, was already among the Gods in the Time of the Giants War.

42. OEta's Flame] Lucretius says nothing of the Death of Hercules, nor of his rising a God from OEta's Flame; but since our Translatour has thought fit to take Notice of it, it will not be improper for us to explain it. Deianira, growing jealous of her Husband Hercules, who, she heard, was fallen in Love with Iole, sent him a Garment that had been dipt in the poysonous Blood of the Centaur Nessus; and which, she had been informed, had a Vertue, to make any one, that wore it, in Love with her. Hercules had no sooner put it on, than all his Limbs began to burn to that degree, by the Force of the poysonous Dye, that unable to resist the Violence of the Torment, he tore up Trees by the Roots, and built himself a Pile, upon the Mountain OEta in Thessaly, then having set Fire to it, threw himself into the Flames: and being thus purg'd from all the Filth he had contracted here below, he was believ'd to go directly to Heaven, and thus, as Creech says,

Therefore the MAN, who thus reform'd our Souls,
 55 That slew these Monsters, not by Arms, but Rules,
 Shall we, ungrateful we, not think a God?
 Especially since HE divinely show'd
 What LIFE the GODS must live; and found the CAUSE
 And RISE of Things, and taught us NATURE'S LAWS.
 60 His Steps I trace; and prove, as THINGS begun,
 By the same Laws, and Nature they live on,
 And fail at last, loose all their vital Ties;
 But chiefly, that the SOUL is born, and dies:

And

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— He rose a God from Oeta's
 Flame.

Milton, in Paradise Lost, B. II.

As when Alcides, from OEchalia
 crown'd

With Conquest, felt th' enve-
 nom'd Robe, and tore

Thro' Pain up by the Roots
 Thessalian Pines,

And Lichas from the Top of
 Oeta threw

Into th' Euboick Sea, &c.

55. But Rules] Epicurus, in
 his Writings, treated not only
 of Physicks, but Ethicks like-
 wise: The first by the Care of
 Laertius have escap'd, most of
 them, from the Rage of Time:
 but of his Ethicks, the little
 that remains, is in his three Epi-
 stles to Herodotus, Moenecæus
 and Pythocles.

57. He divinely show'd, &c.]
 Faber says, that Lucretius here
 speaks of the Treatise that Epi-
 curus compos'd *περὶ διορίσεως*,
 of Holiness.

60. His Steps, &c.] In these
 40. v. the Poet gives us the Ar-
 gument of this Book, in which
 he will endeavour to prove, that
 the World had once a Beginning,

and will one Day have an End:
 Then he will describe the Rise of
 the World, and of Animals;
 will teach what Animals were
 actually produc'd; and what the
 Vainness of the Poets, and the
 Superstition of the Generality of
 Men have feign'd and believ'd.
 He will tell how Names came to
 be given to Things, and how mu-
 tual Society arose from Speech;
 and whence first proceeded Reli-
 gion, and the Fear of the Gods:
 Lastly, he will explain the Mo-
 tion of the Heavens, the Cour-
 ses and Revolutions of the Sun,
 the Moon, and other Planets
 and Stars, and will demonstrate,
 that they are whirl'd about by
 the Force of Nature only, with-
 out the Help or Assistance of
 Providence: For unless he can
 make out such a Motion of the
 Heavens, and prove it to be
 merely natural, he owns he shall
 not be able to take away all Be-
 lief of Providence: For, as he
 observes in the first Book, v. 84.

Long time Men lay oppress'd
 with slavish Fear;
 Religion's Tyranny did domi-
 neer:

And, being plac'd in Heaven,
 look'd proudly down,
 And frighted abject Spirits with
 her Frown.

And that those SHADOWS, which in Dreams appear,
 65 And Forms of Friends, and perish'd Heroes bear,
 Are but loose SHAPES, by FANSY wrought in Air.

Now I must teach, the WORLD, as YEARS prevail,
 Must die; this noble Frame must sink and fail;
 And how at first 'twas form'd; what curious Blows
 70 Made SEED, Earth, Seas, Sun, Heav'n, and Stars, compose:
 What living CREATURES did, what never rose.

How LEAGUES, and how SOCIETY began;
 What civiliz'd the savage Creature, MAN.

Whence sprung that mighty Dread of Pow'rs above,
 75 That Reverence, that awful Fear and Love,
 Which first religious Duties did engage;
 And now secures their holy Things from Rage.

How tow'rd both POLES the SUN's fixt Journey bends,
 And how the Year his crooked Walk attends:
 80 By what just Steps the WAND'RING LIGHTS advance;
 And what eternal Measures guide the Dance;
 Lest some should think their Rounds they freely go,
 Scatt'ring their servile Fires on Things below,
 On Fruits, and Animals, to make them grow.

Or

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64. Shadows which in Dreams appear, &c.] Which the ignorant Vulgar mistake for Souls separated from the Body; but Epicurus has shewn them their Errour, by proving that the Soul dies with the Body. See Gafarellus, in his Collection, de Talismannis.

70. Seed,] The Atoms, which Lucretius held with Epicurus to be the Principles of all Things.

71. Never rose.] He means Chimæras, Scyllas, Centaurs, Hermaphrodites, &c.

77. Holy Things] Lucret.

Fana, Lacus, Lucos, Aras, Simulacraque Divum,

The Temples, Lakes, Groves, Altars, and Images of the Gods.

81. Eternal Measures] Lucretius says, Natura gubernans, and

means what he calls afterwards Fortuna gubernans, v. 108. which our Translatour there calls Chance: And indeed Lucretius means nothing else in this Place: Pliny, 'tis true, calls Nature the Parent and Maker of all Things; And Seneca, lib. 4. de Benef. makes her the God, by whom all Things are made and govern'd. Quid enim, says he, aliud est Natura, quam Deus, & divina ratio toti mundo ac partibus inserta? But Lucretius was of another Opinion, and makes her other than God, and means in Effect nothing more by ruling Nature, than the Power and Motion of the Atoms, that fortuitously and without Design huddled and join'd themselves together into this Frame of the World.

Guide the Dance] The Motions of the Planets may well be

85 Or that some God does whirl the circling SUN,
 And fiercely lash the FIRE HORSES on:
 For ev'n those few exalted Souls, that know,
 The Gods must live at Ease, not look below,
 Free from all meddling Cares, from Hate, and Love;
 90 If they admire, and view the WORLD above,
 And wonder how those glorious BEINGS move,
 They are intrapp'd, they bind their slavish Chain;
 And sink to their religious Fears again;
 And then the World with heav'nly TYRANTS fill,
 95 Whose Force is as unbounded as their Will.

De-

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compar'd to a Dance, from the regular Measures of them.

85. Or that, &c.] Epicurus himself to Herodotus. Τὸ δὲ δῆλον δυνάμεις πρὸς ταῦτα μὴ πρὸς αὐτὸν γένοιτο, ἀλλὰ ἀλειτέρητι. Διὰ τὴν γὰρ φύσιν τῆς πάσης μακαριότητος. ὥς εἰ μὴ τὸτο πρᾶχθῃσιν, ἀπασα δὲ τῶν μετεώρων αἰτιολογία μάταια ἔσται.

86. Fire Horses] The Horses of the Sun are said to be four in Number: Pyroeis, so call'd from πῦρ, Fire; Eous, from ἥως, the Morning; Æthon, from αἶθω, I burn, or I heat; and Phlegon, from φλέγω, I burn. Lucretius mentions them not, but owes this Verse to his Translator.

87. For ev'n, &c.] This and the twelve following Verses are repeated in Book VI. v. 51. and seqq. And in Book I. v. 78. and Book II. v. 606. he teaches almost the same Doctrine.

90. If they admire, &c.] Horace, the Epicurean, manifestly drew from this Fountain, when he said;

Nil admirari prope res est una,
 Numici,

Solaque quæ possit facere & servare beatum:

Hunc solem, & stellas, & decentia certis

Tempora momentis, sunt qui
 formidine nullâ
 Imbuti spectent.

Explain that Passage of Horace by this of Lucretius, and you will be more in the right than the other Interpreters. Moreover this is exactly the Doctrine of Socrates: and therefore this Saying, The Things that are above us, are nothing to us, which is commonly ascrib'd to Socrates by others, is by Tertullian ascrib'd to Epicurus: Sed Epicurus qui dixerat, Quæ super nos nihil ad nos, cum & ipse cœlum aspicere desiderat, solis orbem pedalem apprehendit, &c. lib. 2. ad Nationes.

94. Heav'nly Tyrants] In the second Book he calls them Dominos superbos, proud, imperious Lords. And Velleius, in Cicero, l. 1. de Nat. Deor. says the same Thing. Dum Deum rerum auctorem facitis, imposuistis in cervicibus nostris Dominum sempiternum, quem dies & noctes timeamus. Quis enim non timeat omnia providentem, & cogitantem, & animadvertentem, & omnia ad se pertinere putantem, curiosum & plenum negotii Deum? By making God the Authour of all Things, you set over us an eternal Lord, of whom we must Day and Night stand in Awe. For who can not but dread a God, who

Deluded Ignorants! who ne'er did see,
 By REASON's Light, what can, what can not be;
 How ev'ry Thing must yield to fatal Force;
 What steady Bounds confine their nat'ral Course.
 100 But now to prove all this; first cast an Eye,
 And look on all BELOW, on all on HIGH:
 The solid EARTH, the SEAS, and arched SKY:
 One fatal Hour (dear YOUTH) must ruin all;
 This glorious Frame, that stood so long, must fall.

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who oversees all, provides for all, thinks of all, takes Notice of all, and believes that all belongs to him, in short, a meddling, inquisitive, and never idle God?

100. But now, &c.] In these 19. v. he at length falls upon his Subject; which, he says, is a noble one indeed, but intricate, and to which he shall find it difficult to gain Belief: for Men do not easily give Credit to what they are unwilling to believe: and who would willingly regard the Ruin of the World, of which he can not be a Witness without his own Destruction? The Poet himself seems to commiserate so great a Misfortune:

tria talia texta
 Una dies dabit exitio— v. 95.

Which he did certainly dread,
 when he said,

Quod procul à nobis flectat For-
 tuna gubernans. v. 108.

All-ruling Chance, avert it far
 from us.

Moreover, upon the Words of Lucretius cited above, Tria talia, &c. Faber observes, that Ovid pays him a Compliment in his own Coin;

Carmina sublimis tunc sunt pe-
 ritura Lucreti,

Exitio terras cum dabit una
 dies.

104. This Frame must fall,] This is deny'd by Aristotle, l. 1. de Cœlo, and by Plato in Timæus; tho' they disagree in the Manner of it: For Plato says, the World had a Beginning, and that God created it; but denies it will ever have an End; not that it is immortal in its own Nature, but because it would be unworthy of the Wisdom of God, whose Workmanship it is, to dissolve so glorious a Frame, or to suffer it to be dissolv'd! But Aristotle holds, That whatever has had a Beginning, may, and will have an End: but that the Heavens never were created, and will never be dissolv'd: Nor ought Aristotle alone to boast, that he asserted a World uncreated and eternal: for before him Xenophanes, Parmenides, Melissus, Philolaus, Ocellus, Aristæus, the Chaldeans, and others taught the same Doctrine. In like manner, not Epicurus alone of all the antient Philosophers, gave the World a Beginning; for Empedocles, Heraclitus, Anaximander, Anaximenes, Anaxagoras, Archelaus, Diogenes, Leucippus, Democritus, the Brachmans, the Egyptians, and others, were of the same Opinion; to which Pliny too subscribes, in these Words: Nu-
 men

- 105 I know, that this seems strange, and hard to prove,
 (Strong harden'd Prejudice will scarce remove)
 And so are all Things new, and unconfin'd
 To Sense, nor which thro' that can reach the Mind,
 Whose Notice, Eye, nor Hand, those only Ways,
 110 Where Science enters, to the Soul conveys.
 And yet I'll sing : perchance the foll'wing Fall
 Will prove my Words, and shew 'tis Reason all :
 Perhaps thou soon shalt see the sinking WORLD
 With strong Convulsions to Confusion hurl'd ;
 115 When ev'ry rebel ATOM breaks the Chain,
 And all to prim'tive NIGHT return again :
 But CHANCE avert it ! Rather let REAS'N shew
 The WORLD may fall, than SENSE should prove it true.
 But

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men esse mundum credi par est,
 æternum, immensum ; neque
 genitum, neque interitum un-
 quam. Nat. Hist. lib. 2. cap. 1.
 Thus Epicurus agreed with us,
 That the World had a Begin-
 ning ; but he err'd in teaching,
 that God was not the Creatour
 of it : And we know, for certain,
 that, In principio creavit Deus
 cœlum & terram. And both
 Epicurus, and the other Philo-
 sophers with him, were mista-
 ken, when they taught, That
 the World was not created out
 of Nothing, but made of a pre-
 existing Matter. Lucan, in
 Pharsal. lib. 1. v. 73. describes
 the future Dissolution of the
 World, in the following Ver-
 ses :

Sic cum, compage so-
 lutâ,
 Sæcula tot mundi suprema coe-
 gerit hora,
 Antiquum repetens iterum Cha-
 os, omnia mistis
 Sydera syderibus concurrent ;
 ignea pontum
 Astra petent ; tellus extendere
 littora nolet,
 Excutietque fretum : fratri con-
 traria Phœbe

Ibit, & obliquum bigas agitare
 per orbem
 Indignata diem poscet sibi : to-
 taque discors
 Machina divulsi turbabit fœdera
 mundi.

Which May has not amiss inter-
 preted in the following Verses :

So when this Knot of Nature is
 dissolv'd,
 And the World's Ages in one
 Hour involv'd
 In their old Chaos ; Seas with
 Skies shall join,
 And Stars, with Stars confound-
 ed, lose their Shine.
 The Earth no longer shall extend
 its Shore,
 To keep the Ocean out : the
 Moon no more
 Follow the Sun ; but, scorning
 her old Way,
 Cross him, and claim the Gui-
 dance of the Day ;
 The falling World's now jarring
 Frame no Peace,
 No League shall hold, &c.

109. Those only Ways, &c.]
 For all Men give most Credit to
 those Things which they see or
 touch, and Sight is the chief In-
 les

But now before I teach these Truths, more sure
 120 And certain Oracles, and far more pure,
 Than what from trembling *Pythia* reach'd our Ears;
 I'll first propose some Cure against thy Fears:

Left

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let of Knowledge: Therefore
 Milton, complaining of his be-
 ing blind, says finely;

*Vis animæ divina regit, sacroq;
 meatu*

*Conspirat Deus, & tacitâ ratio-
 ne gubernat.*

Thus with the Year
 Seasons return, but not to me
 returns

Which Creech thus renders:

Day, or the sweet Approach of
 Ev'n and Morn,
 Or Sight of vernal Bloom, or
 Summer's Rose,
 Or Flocks, or Herds, or human
 Face divine:

To this vast Frame, in which
 four Parts conspire,
 Of diff'rent Form, Air, Water,
 Earth, and Fire,
 United God, the World's al-
 mighty Soul,

But Cloud instead, and ever-
 during Dark

By secret Methods, rules and
 guides the Whole;

Surround me, from the chearful
 Ways of Man

By unseen Passes he himself con-
 veys

Cut off, and for the Book of
 Knowledge fair

Thro' all the Mass, and ev'ry
 Part obeys.

Presented with an universal
 Blank

But these Men the Poet despises,
 and treats them and their fool-
 ish Doctrine with the utmost
 Contempt and Indignation.

Of Nature's Works, to me ex-
 pung'd and raz'd;

And Wisdom at one Entrance
 quite shut out.

121. *Pythia*] See the Note
 upon v. 758. Book I. from
 whence this and the foregoing
 Verse are repeated. And to what
 is there said on them, I will here
 add some farther Particulars
 concerning the Oracle of Apollo,
 who was call'd *Pythius*, from his
 killing the *Python*, a huge Ser-
 pent, which had its Name *Ἐντὶ
 τῷ πυθῆϊ*, because he was engen-
 der'd of the Putrefaction of the
 Earth, and sprung from the
 Filth that the Flood of *Deucali-*
on had left behind it, *Ovid.*
Metam. i. v. 438.

119. But now, &c.] But because
 the Folly of the Stoicks, the Ig-
 norance of others, and the Su-
 perstition of the Generality of
 Men had oppos'd many Obje-
 ctions to this Opinion, *Lucre-*
tius removes them all, and first,
 in 39.v. confutes the Stoicks, who
 held, that the Sun, the Sea, the
 Earth, in short, the Universe,
 being animated by a Spirit in-
 fus'd thro' the whole, is God.
 Thus *Manilius*, lib. i. v. 238.

*Hoc opus immensi constructum
 corpore mundi,*

*Membraque naturæ diversâ con-
 dita formâ*

*Aeris, atque ignis, terræ, pe-
 lagique jacentis*

Te quoque, maxime
Python,

*Tum genuit; populisque novis,
 incognite Serpens,*

*Terror eras: tantum spatii de
 monte tenebas:*

Hunc

Left SUPERSTITION prompt thee to believe,
That SUN and MOON, that SEAS and EARTH must live;
Are

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Hunc Deus arcitenens,——
Mille gravem telis, exhaustâ pe-
ne pharetrâ,
Perdedit, effuso per vulnera ni-
gra veneno.

Now the Person, or Prophetess, who, instead of Apollo, pronounc'd the Oracle, and gave Answer to those that came to consult the God, was a Maid, and the first that perform'd it was Phenomœ, the Daughter of Apollo. The Oracle was delivered from a Place in the Temple, call'd the Adytum, which was the most secret and retir'd Part of it, and into which none but the Prophetess was permitted to enter: and, according to the Description Strabo gives of it, it was a deep and crooked Cave, with a Mouth or Entrance but indifferently large, and out of which the Answer of the God was thought to ascend, and inspire the Prophetess. Over the Mouth of this Cave stood the Tripod, upon which when the Prophetess got up, she was immediately transported with a Spirit of Divination; and then gave the Answer, sometimes in Prose, sometimes in Verse. Du Choul, in his *Treatise de la Religion des anciens Romains*, gives us the Form of the Tripod, with a Crow sitting on it, as a Bird sacred to Apollo, and with a Harp and Laurel at the Feet of it. To which we may add, that in Constantine's Oration, ad Sacrorum coetum, in Eusebius, there is Mention made, cap. 18. of a Serpent also twining about the Tripod, and of a Diadem with which the Prophetess was adorn'd. Lee, in the Tragedy of Mithridates, describes the Agony of the Pythian, when, in-

spir'd by the God, she was about to pronounce the Oracle.

At Delphi, when the glorious Fury
Kindles the Blood of the prophetic Maid,
The bounded Deity does shoot her out,
Draws ev'ry Nerve, thin as a Spider's Thread,
And beats the Skin out like expanded Gold.

And Dryden, in *OEdipus*, makes the old Tiresias say:

Now the God shakes me! he comes! he comes!

I feel him now
Like a strong Spirit, charm'd into a Tree,

That leaps, and moves the Wood without a Wind:

The rowzed God, as all this while he lay

Intomb'd alive, starts, and dilates himself:

He struggles, and he tears my aged Trunk

With holy Fury; my old Arteries burst;

My rivell'd Skin,——

Like Parchment, crackles at the hallow'd Fire:

I shall be young again, &c.

To both of whom Virgil shew'd the Way, in his Description of the convulsive Rage of the Cuman Sybil. *Æneid*. 6.

[124. That Sun, &c.] Pythagoras, Plato, Trismegistus, and many others of the antient Philosophers, imagin'd the World to be endow'd with a rational Soul, and to partake of the Nature of the God that made it. They were induc'd to this Belief, by considering the admirable Order and Connexion of all the Parts

125 Are Gods eternal, and above the Rage,

And pow'rful Envy of devouring Age :

And

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Parts of the Universe ; which, they were persuaded, could not be sustain'd, but by a Soul intrinsically informing, ordering, disposing, and connecting them. This Soul Plato indeed did not believe to be God himself, but the Work of the Supream God : but Pythagoras and Thales, as we learn from Minutius Felix, asserted it to be God himself : To this Opinion the Hermetick Philosophers seem likewise to subscribe, and explain it in this manner : They tell us, that the Divine Spirit, which produc'd the World out of the first Water, being infus'd, as by a continual Inspiration, into all the Works of Nature, and largely diffus'd thro' them, by a certain secret and continual Act, moving the Whole, and every individual Part of it, according to its Kind, is the Soul of the World. Plato, and the old Academicks, as we find their Opinion deliver'd by Cicero, in Acad. Quæst. lib. 1. say thus of it ; The several Parts of the World, and all Things contain'd in them, are kept together by a sensitive Nature ; which is endow'd likewise with perfect Reason : It is also sempiternal ; because there is nothing more strong, by the Power or Force of which it can be dissolv'd. And this Nature is the Power, which is call'd the Soul of the World : Plutarch, de Placitis Philosoph. lib. 4. cap. 1. teaches, That Heraclitus affirm'd the Soul of the World to be an Exhalation of the humid Parts of it. Varro, on the contrary, would have it to be Fire, but means, perhaps, the same Thing with Chalcidius in the Timæus, where he calls Vesta, the Soul of the universal

Body : or with Pliny, who asserts the Sun to be the Soul of this World : *Hunc mundi totius esse animam, ac plane mentem, hunc principale Naturæ regimen, ac Numen credere decet,* says he, lib. 2. cap. 6. But the Stoicks went yet farther, and held, That every one of the Celestial Bodies, that have Motion, is to be esteem'd in the Number of the Gods : and this Opinion they grounded on the Constancy they had observ'd in the Revolutions of the Heavens, and in the Courses of the Stars ; whence they concluded their Motion to be voluntary, and, consequently, that they are Gods. Thus the Stoick Lucilius in Cicero, says, *Hanc igitur in stellis constantiam, hanc tantam in tam variis casibus, in æternitate convenientiam temporum, non possum intelligere, sine mente, ratione, consilio : Quæ cum in syderibus esse videamus, non possumus ea ipsa in Deorum numero non ponere : De Natur. Deor. lib. 3.* And a little higher he says, *Restat ut motus Astrorum sit voluntarius : quæ qui videat, non indocte solum, verum etiam impie faciet, si Deos esse neget.* But Lactantius retorts their very Argument upon these Philosophers, and says, That the constant and fix'd Revolutions and Courses of the celestial Bodies, are an evident Argument that they are not Gods : For, if they were, they would not be determin'd to, nor prescrib'd any certain Motions ; but, like Animals upon Earth, whose Will is free, would move wherever they list. *Quid, quod argumentum illud, quo colligunt universa cœlestia Deos esse, in contrarium valet ? Nam si Deos esse idcirco opinan-*

tur,

And therefore they, whose impious Reasons try, (Sky-
 (More bold than those fond Fools that storm'd the }
 To prove the WORLD is MORTAL, and may die; }
 That

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tur, quia certos & rationabiles cursus habent, errant: ex hoc enim apparet Deos non esse, quod exorbitare illis, à præstitutis itineribus non licet. Cæterum si Dii essent, huc atque illuc passim sine ullâ necessitate ferrentur, sicut animantes in terrâ; quorum quia liberæ sunt voluntates, huc atque illuc vagantur, ut libuit; & quò quemque mens duxerit, eò fertur. De Orig. Error. cap. 5. Now the Reason, why Lucretius lashes the Authours of these Opinions, and treats them with so much Scorn and Indignation, is, because their Belief of the Soul of the World, presses hard his impious Hypothesis, concerning the Divine Providence: For, release but the Soul from that Union, which these Philosophers have thus foolishly assign'd, and then to hold a Soul of the World, and an all-ruling Providence will be all one and the same Thing.

128. Fond Fools] The Giants, who fought against the Gods at Phlegra, and attempted to scale Heaven, by heaping one on another the Hills of that Countrey, and of Thessalia. Virgil, Georg. 3. v. 281. See likewise the Note on Book I. v. 243. To which I add, that Phlegra was so call'd $\pi\rho\tau\epsilon\rho\phi\lambda\epsilon\gamma\rho\alpha$, to burn, perhaps, because of the Giants being destroy'd there chiefly by Lightning: or, as others, from Baths of hot Water that arise thereabouts. Eustathius says, it was likewise call'd Pallene; and that the Wickedness of the Inhabitants gave Occasion to the Fable of the Giants Fight. Now what Lucretius here says, is this: Lest you should think, that all those,

who by their Arguments endeavour to prove the World to be mortal, equally deserve to be punish'd for their Impiety, as were the impious Giants of old, who, in their Way, did likewise all they could to destroy Heaven, and durst to wage War with the Gods. Whoever desires to be fully instructed concerning Giants, may consult the learned Cassarion, who has treated of them at large: I will only add, That the antient Heathens drew the Occasion of this, and of many of their other Fables, from the Mosaical History, which they wretchedly profan'd and deprav'd by their childish Fictions: And that too the rather, if it be true what Bouldue, a French Capuchin, in a Treatise printed not long ago, and intituled, De Ecclesiâ ante legem, tells us, in lib. 1. cap. 9. That the Names, Raphaim, Emim, Zuzin, and others, as he says, commonly in Scripture taken for Giants, ought not to be expounded in that Sense. Then he affirms, that the Title of Giant was antiently a Name of Honour, by which they distinguish'd such Persons, as in those Days were Restorers of Piety; and that the Assemblies of Giants, were Colledges of Instructions in that Age of the World. Thus he endeavours to prove, that Nimrod was, in that Sense, a Giant, a Man instructed by God himself: and this he would make good out of Methodius. But these Assertions of his, and the curious Proofs he alledges from their Hebrew Titles, are new and daring Flights of Fancy.

130 That Orbs can fall, the Sun forsake his Light,
 And bury'd lie, like meaner Things, in Night,
 Calling that MORTAL which is ALL DIVINE,
 Must needs be damn'd for their profane Design.

For these are so unlike the Gods; the FRAME
 133 So much unworthy of that glorious Name,
 That neither lives, nor is an Animal;
 That neither feels; dull Things, and senseless all.

For

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130. That Orbs, &c.] That the Heavens are immutable and incorruptible, nay, even immaterial, and consequently no ways obnoxious to the Catastrophe which Lucretius here asserts, has always been the vulgar Opinion, as well as the Belief, of Aristotle, Xenophanes, Averroes, Cicero, and indeed of most of the Philosophers: And tho' Experience itself of the visible Mutations, that sometimes happen in them, for Example, the new Star, that appear'd in Cassiopeia, in 1573. and vanish'd the Year following, are abundantly sufficient to convince them, by natural Reason, of the Erroneousness of that Opinion; yet some Men are so given up, even to the most reprobate Sense of Aristotle, that not the Divine Authority itself can draw them from it: as in this Point particularly, Suarez, and many others, are so far from believing the Heavens to be corruptible and mutable, that they will allow them to be chang'd only accidentally, as they call it, and not substantially, at the last Day: Upon which Maldon. on St. Matthew, says very well, That he had rather believe Christ, who affirms it, than Aristotle, who denies it.

134. For these, &c.] In these 24. v. he says, That it is so far from being true, That what he is about to teach of the future Dissolution of the World, will derogate from the Power and

Divinity of the Immortal Gods, that, on the contrary, it will evince their Dignity, and the Excellence of their Nature; because it will help us to distinguish between what is endow'd with a Divine Body, and what is not: For what can be more disrespectful and injurious to the Gods, than to declare aloud, that the Heavens, the Earth, the Sea, the Sun, the Moon, and the Stars, are endow'd with their Immortality, Eternity, and Divine Understanding, as they most manifestly do, who hold them to be immortal? Especially, since they are incapable even of being animated with the Breath of Life: For a Soul can no more be in them, than a Tree in the Air, a Cloud in the Sea, or a Fish upon dry Ground: And as every Thing has a proper Place assign'd it, to be produc'd and live in; So neither can the Soul be produc'd, or exist without a Body. This Opinion is both impious and repugnant to true Reason; but since we have already fully answer'd, in the third Book, all the Epicurean Objections against the Immortality of the Soul, we will not trouble our Reader with the Repetition of them. Besides, the Drift of Lucretius is, to prove, that Heaven, Earth, Sea, &c. are mortal, and consequently will be dissolv'd, and perish.

136. Neither] None, not one of them: we generally say, nei-

For LIFE, and SENSE, the MIND, and SOUL refuse
 To join with all; their BODIES must be fit for Use:
 140 As HEAV'N does bear no TREES; no STARS below;
 As STONES no BLOOD, and FISH no MOUNTAINS know;
 But each has proper Place to rise and grow:
 So neither SOULS can rise without the BLOOD, (cou'd,
 And NERVES, and VEINS, and BONES; for grant they
 145 Then thro' each single Part, as Arms, or Head,
 'T would first be fram'd, thence o'er the other spread;
 As WATER, into Vessels pour'd, will fall
 First to one Part; then rise, and cover all.
 But since 'tis certain, that a proper Place
 150 Is settled for the Life, and the Increase
 Of MIND and SOUL; 'tis Folly to believe
 That they can rise without fit LIMBS, or live;
 Or be in flitting Air, or chilling Seas,
 Or Earth, or scorching Flames. Fond Fancies these!
 155 Therefore they are not GODS, their SENSE divine;
 For they are made unfit for that Design;
 Since none with MINDS in vital Union join.
 Nor must we think these are the blest ABODES,
 The quiet MANSIONS of the HAPPY GODS;

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ther of them, when we speak but
 of two.

140. As Heav'n, &c.] You
 will find this and the following
 11. v. B. III. v. 755.

144. For grant, &c.] This
 and the four following Verses are
 rejected by Faber, who imagines,
 they were by Mistake brought
 to this Place, together with the
 five preceding Verses, from the
 third Book, where we find them
 all together; but his Supposition
 is without Reason: For they
 seem to be a Part of this Argu-
 ment, and as much to the Pur-
 pose as the other Verses of it.
 For, says the Poet, if even in our
 Bodies, which are compos'd of
 Veins, Nerves, Blood, &c. there
 be certain and appointed Places,
 where the Mind and the Soul are
 born, and exist apart by them-
 selves, it is in vain for any one

to pretend, that there is a Mind
 and a Soul in the Heavens, the
 Earth, the Sea, and other Bo-
 dies, that have no Organs what-
 ever.

156. For they are, &c.] To
 this Purpose Velleius, in Cicero,
 lib. 1. De Nat. Deor. says: Qui
 Mundum ipsum animantem sa-
 pientemque esse dixerunt, nullo
 modo animi naturam intelligen-
 tes viderunt, in quam naturam
 cadere possit; They who said,
 that the World is an Animal,
 and endow'd with Understand-
 ing, did not in the least know
 the Nature of the Mind, nor in-
 to what Nature it can be infus'd.

158. Nor must, &c.] Since
 the Gods are immortal, and e-
 ternal, they must of Necessity
 have Abodes that are so too:
 Therefore all Men place the
 Gods in the Heavens, which,
 for

160 Their Substance is so thin, so much refin'd,
 Unknown to SENSE, nay, scarce perceiv'd by MIND:
 Now since their Substance can't be touch'd by Man,
 They cannot touch those other Things that can;
 For whatsoe'er is touch'd, that must be touch'd again. }
 There-

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for that Reason, say they, can never be destroy'd. To this the Poet answers in these 11. v. That this is only the Invention of Poets, or of the ignorant Vulgar: For the Nature of the Gods is too subtile to touch such thick Bodies as the Heavens; and therefore we must not believe them to be the Mansions of the Gods. Nay, says he, no Part of the Universe is, or can be their Abodes: For whatever has an Abode, or is in any Place, both touches and is touch'd: For Place, and the Thing plac'd, as they call them, are Bodies; and Body can both touch and be touch'd: But the Gods neither touch nor are touch'd: They are not touch'd, because their Nature is so subtile, that it is wholly imperceptible to our Senses: and therefore we ought to believe, that their Abodes are answerable to their Nature, and far different from ours, that is, from those that are commonly assign'd to the Gods: that is to say, that they are of so subtile a Nature, as renders them wholly imperceptible likewise to our Senses. But all the Parts of the World are perceivable to our Senses; therefore none of them can be the Abode of the Gods. And since the Gods are not touch'd, it necessarily follows that they do not touch:

Tangere enim non quit, quod
 tangi non licet ipsum. Lucr.

For nothing can touch, but
 what may be touch'd again.
 Therefore you must look out

for some other Mansions for the Gods, than those you have hitherto assign'd them.

Nardius takes Occasion from this Argument to prove, that Lucretius contradicts his own Doctrine, and that even according to his own Assertions there can be no Gods: He argues to this Purpose: If the Gods, says he, of Lucretius are no where, then Lucretius has no Gods: for they must certainly be nothing at all, or they must be the Void: This is evident from his own Principles: For Book I. v. 550. he says,

Two Sorts of Beings Reason's
 Eye descry'd,
 And prov'd before, their Dif-
 f'rence vastly wide:
 Body and Void, which never
 could agree
 In any one essential Property:
 For Body, as 'tis Matter, is
 from Place
 Distinct; and Void from Body,
 as 'tis Space.

Therefore, whatever is, is either
 Place, or a Thing plac'd.

—And to afford a Place,
 Is the peculiar Gift of empty
 Space. B. I. v. 490.

Thus if the Gods are not Bodies, they are empty Space, and altogether nothing, as was said before. That they are not Bodies, Lucretius himself can not deny: What can neither touch, nor be touch'd, is not Body: The Gods of Lucretius neither are touch'd, nor touch; therefore they are not

165 Therefore the MANSIONS of those HAPPY POW'RS
 Must all be far unlike, distinct from ours;
 Of subtile Nature, suitable to their own:
 All which, by long Discourse, I'll prove anon.
 But now to say this spacious WORLD began,
 170 By bounteous HEAV'N contriv'd to pleasure MAN;

And

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not Bodies: For nothing but Body can be touch'd or touch. He has confirm'd the minor Proposition in this Argument:

Now since their Substance can't be touch'd by Man,
 They can not touch those other things that can;
 For whatsoe'er is touch'd, that must be touch'd again.

The supine Idleness and Inaction of his Gods, made him aware how he plac'd them among Bodies: And B. I. v. 486. he says,

What ever is, a Pow'r must own,
 Or fit to act, or to be acted on;
 Or be a Place, in which such Things are done;
 Now Body only suffers, and acts--

And yet he allows them a Body, but so subtile, as not to fall under the Perception of Sense: Perhaps he will say, with Epicurus, that his Gods have not a Body, but as it were a Body: And thus he will set up a third Nature, in Contradiction of his own Doctrine, when he taught, That

A third diff'rent Nature in vain is sought,
 And ne'er can be found out by Sense or Thought.

Book. I. v. 491.

Certainly he will not pretend, that his Gods are Conjuncts, or Events of concrete Bodies: What

then can they be, but a meer Fiction, an empty Word, to sooth the credulous Ears of unthinking Men? And since he is contriving some most tenuious Abode for them, what can be more tenuious than the Void, which is wholly destitute of Body? But he is officiously about to invent something yet more subtile, and not unlike their own Nature; that is to say, Nothing.

167. Suitable to their own] The same Difference of Tenuity as there is between us and the Gods, there ought to be likewise between their Abodes and ours: and thus by, suitable to their own, he means, that the Seats and Mansions of the Gods, consist of the same Principles as the Gods themselves.

169. But now, &c.] But, say they, the Gods made this World, and decreed it to be eternal. To which Lucretius answers in 32. v. Did they make it for their own sake, or out of Love to Man? Whoever says for their own, may as well pretend, that to be ador'd and worship'd by Men is of Advantage, and adds to the happy State of a God, who is intirely blest'd, and wants nothing: And if any one say for the Sake of Man, let him tell me, what Trouble it would have been to us if we never had had a Being, not to have a Being?

To make good his Assertion in this Place, Lucretius chiefly labours to prove, that the Gods did not make the World for the Benefit of Man. Therefore, says he, there is no Reason, why any of

And therefore this vast FRAME they toil'd to raise,
 And fit for us, should meet with equal Praise ;
 Or be esteem'd ETERNAL, all secure
 From Ruin, or the TEETH of TIME endure ;
 175 And that 'tis impious to design to prove,
 What was contriv'd by the wise POW'RS ABOVE,
 And fix'd eternal for the MAN they love ;

}
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of us should, as in Gratitude for so great a Favour, extol this mighty Work, believe it eternal, and that it will be immortal : For of what Advantage could our Acknowledgements be to the Gods, that that Consideration only should induce them to make the World for the Sake of us, or for our Benefit ? Besides, what new Thing was there to allure the Gods, who enjoy the most perfect Tranquillity, to change, either for their own sake or ours, their former Life of happy and uninterrupted Repose, and to take upon themselves the Care of Man, and of all created Beings, they who, 'till then, liv'd in undisturb'd Delights and Happiness ? Farther, what could it have been the worse for us, if we had never been created ? For he, who has once tasted the Sweetness of Life, with good Reason desires to live on : but they who never had a Being, how can they be in Love with the Pleasures of Living ? Moreover, how could the Gods fabricate the World for the Sake of Man : of Man, I say, of whom they had no previous Notice, no Model to work by ? For nothing can be made without an Idea. And whence had the Gods first their Idea of creating the World ? Whence had they their innate Notices of the World, by which they might see in their Mind, what they purpos'd and resolv'd to make ? For since the World was to be created of Atoms, the Gods

could by no other Means come to the Knowledge of the Power of those Atoms, nor of what they would be able to effect by the Change of their Sites, Orders, and Positions ; unless Nature, by creating the World from the fortuitous Coalition of Atoms, had afforded them a Specimen of it, and unless they had experimented, by the very Rise of Things, how great was the Efficacy of the Atoms. Thus, so far is it from being true, That the Gods made this World for the Sake of Man, that indeed they had no Hand in the Creation of it ; but, by the Guidance of Nature, it was made by a fortuitous Concourse of Atoms.

Thus Lucretius begins his Impiety anew, and endeavours to raise a Dust, and blind Mens Understandings : And, to secure his former Opinion, pretends Objections intermixt with Scoffs, against all those, who, upon sober Principles, and a strict Search into the Order and Disposition of Things, were forc'd to confess this Frame to be the Contrivance of some intelligent Being, and the Product of Wisdom itself. And here, agreeable to the Epicurean Principles, he supposes Interest to be the Cause of all good Nature, and the only Spring of Action, and then peremptorily demands, what suitable Returns Man could make the Gods for all their Labour, or what additional Happiness they could receive ? Where he makes

That this can DIE, that this to FATE can bow,
 And, with bold Reason, strive to overthrow,
 180 And make that mortal they design'd not so:
 'Tis fond: For what could MAN return again?
 What Profit to the Gods for all their Pain,
 That they should work for him? Why break their Rest,
 In which they liv'd before, secure and blest?
 185 What coming Joy, what Pleasure could they view,
 To leave their former Life, and seek a new?
 For they delight in new, whose former State
 Was made unhappy by some treach'rous Fate:
 But why should they, who liv'd in perfect Ease,
 190 Who ne'er saw any Thing, but what did please,
 Be tickled thus with Love of Novelties?
 Perhaps they lay obscure, and hid in Night,
 Till Things began, and Day produc'd the Light.

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makes another wild Supposition, which will never be granted, viz. That to create, or dispose, is Toil and Trouble to Omnipotence; for such I have prov'd every Eternal and Self-existent to be. Now let us look a little on the immoderate Praises he bestows on his Epicurus, and ask him, what Rewards could Posterity give him for his Philosophy, how could he receive any Benefit from their Praises and Commendations? What then, was his God Epicurus a Fool, who lost his own Ease, oppos'd himself to so many Philosophers, and labour'd to write almost infinite Volumes, when he had no Motive to engage himself in all this Trouble? No, Lucretius highly esteems him for the Benefits he bestow'd on Mankind; and thus answers himself, whilst he allows single Benevolence to be a strong Motive to Action: And this is allow'd by general Consent, he being hated, who looks only on his own Interest, and makes that the Measure of all his Designs. And that the Deity is benevolent in the highest Degree, is as

evident, as that it is a Perfection to be so: for 'tis already prov'd, that infinite Perfection is a necessary Consequence of Self-Existence. But when he endeavours to prove, that to Be is no Good to Man, what but Laughter can be return'd to such an idle Opposition of common Sense? For if to be continued in Being is so great a Good, and so desireable, as all Mens Wishes and Endeavours sufficiently evince, then surely to bestow that Being, is at least an equal Blessing. And to answer his impudent Question, How the Deity could have his Knowledge? 'tis sufficient to return, That his Method of Knowing is not to be measur'd by ours, that he is Omniscient, that being a Perfection, needs not any external Impulse from Images.

185. What coming, &c.] Cicero, lib. 2. de Nat. Deor. speaks to the same Purpose in these Words. Quid autem erat, quod concupisceret Deus mundum signis & luminibus, tanquam Ædilis, ornare? Si, ut Deus ipse melius habitaret, antea, videlicet tem-

Besides; what Harm, had the SUN idly ran,
 195 Nor warm'd the MUD, nor kindled it to MAN,
 What Harm to us, if we had ne'er began?
 True: those that are in BEING once, should strive,
 As long as PLEASURE will invite, to live;
 But they, who ne'er had tasted Joys, nor seen,
 200 What Hurt to them, suppose they ne'er had been?
 Besides: Whence had the Gods their Notice,
 whence their MIND,
 Those fit IDEAS of the human Kind?
 What IMAGE of the Work they then design'd?
 How did they understand the Pow'r of SEED,
 205 That they, by Change of Order, Things could breed;
 Unless kind NATURE'S Pow'rs at first did show
 A Model of the Frame, and taught them how to know?
 For SEEDS of BODIES from eternal strove,
 And us'd, by STROKE, or their own WEIGHT, to move,
 210 All Sorts of UNION try'd, all Sorts of Blows,
 To see if any way would Things compose:

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tempore infinito, in tenebris, tanquam in gurgustio habitaverat? Post autem, varietate ne eum delectari putamus, quod coelum & terras exornatas videmus? Quæ ista potest esse oblectatio Deo? quæ si esset, non eâ tam diu carere potuisset. Why was it, that God was so desirous to adorn this World with Luminaries, and Constellations, like the gawdy Cassock of a Herald? Was it that he might live himself the better? And had he liv'd till then, that is to say, an infinite Space of Time, in the Dark, as in a Cabin? Or do we imagine, that at length he took Delight in Novelties, and therefore cloath'd the Heavens and the Earth in all that glorious Array, in which we now behold them? What Delight can that be to God? Were it any, he would not have been so long without it.

201. Whence had, &c.] The Notice, or Knowledge, of all

Things, proceeds from the Images of Things, that offer themselves to the Mind: Besides, the Gods do nothing inconsiderately; but foresee whatever they resolve to do. Now no Images of Things could come into the Divine Mind; since the Things themselves did not yet exist. 'Tis idle therefore to pretend, that the Gods created the Heavens, the Earth, the Animals, and all Things. This Argument is contain'd in 15. v.

208. For Seeds, &c.] In these 8. v. the Poet delivers the Opinion of Epicurus concerning the Creation of the World, which he deny'd to be the Work of the Gods; but taught, that all Things are effected by Nature, or rather by Chance and Fortune, that is, by a fortuitous Concourse of Atoms: For he would not allow Fortune or Chance to be any Thing, that, of it self, temper'd and dispos'd the Atoms to work these Effects

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And so, no Wonder, they at last were hurl'd
 Into the decent ORDER of this WORLD;
 And still such MOTIONS, still such Ways pursue,
 215 As may supply decaying Things by new.
 For were I ignorant how BEINGS rise,
 How Things begin; yet Reasons from the Skies,
 From ev'ry Thing deduc'd, will plainly prove,
 This WORLD ne'er fram'd by the wise POW'RS ABOVE;
 220 So foolish the Design, contriv'd so ill!
 For first; those Tracts of AIR what CREATURES fill?
 Why BEASTS in ev'ry GROVE, and shady HILL?

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we now behold, but that the Atoms themselves are that very Chance: forasmuch as without any Premeditation, they meet, and mutually cleave to one another, and thus make all concrete Things, just as it happens, without any preconceiv'd Design: And thus, as Dryden finely expresses this Opinion of Epicurus,

The various Atoms interfering
 Dance
 Leap'd into Form, the noble
 Work of Chance.

Lucretius too explains it in the same Words, as here, Book I. v. 1021. and in this Book, v. 470. he repeats these Verses again.

216. For were, &c.] To prove the World not to have been made by the Gods, the Poet, in these 34. v. brings some Arguments from the ill-contriv'd Frame, Disposition, and Make of it. The Work of an all-wise Artist, says he, ought to be perfect in all Points; not like the Earth with Mountains, Woods, Lakes, &c. hideous and dreadful to behold: Some Parts of it should not be chill'd with perpetual Frost, nor others parch'd with continual Heat: It should produce Fruits of all Sorts, rather than Thorns, Briars, and other useless, nay, noxious Plants:

It should be disturb'd with no Storms nor Tempests; it should breed no wild Beasts, nor other Animals, that are dangerous and destructive to Man: nor should various Diseases attend the various Seasons of the Year, and shorten our Days: but all things should have been made pleasant and beautiful, accommodated only to the Ease and Pleasure of Man: and thus it would indeed have been a Work worthy of a wise and bounteous God.

Thus our presumptuous and daring Poet takes upon him to find Fault with the Contrivance it self, and, like that proud King of Arragon, could, no Doubt, have mended the Design. And here, tho' 'tis unreasonable to demand a particular Cause and Motive for every Contrivance, since we are not of the Cabinet-Council of Nature, nor assisted at her Project, yet his Exceptions (no Doubt the best his labouring Wit could invent) are so weak, so often answered, and so easily (on Principles grounded on certain History, and infallible Record) to be accounted for, that there is no need to frame a particular Answer, nor Reason to fear, that any, the meanest Reader, can ever be surpriz'd with such Trifles.

221. For first, &c.] In these 6. v. is contain'd his first Argument,

Vast Pools take Part, and the impetuous TIDE,
 Whose spreading Waves the distant Shores divide ;
 225 Two Parts in three the TORRID ZONE does burn,
 Or FRIGID chill, and all to Desarts turn.

And

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ment, in which he proves, That far the greatest Part of the Earth is useless to Man; forasmuch as it consists partly of Mountains, Woods, and Rocks; and that the Sea and vast Lakes take up another Part of it: as also because a third Portion of it is uninhabitable, by Reason of the violent Heat of the Sun; and a fourth, on Account of its being extremely cold; that is to say, under the Torrid Zone, and under the two Frigid Zones. How then can it be pretended, that this Earth, which abounds with so many Defects and Inconveniences, was created by the Gods for the Sake of Man?

Those Tracts of Air what Creatures fill?] Lucretius:

Quantum cœli regit impetus ingens,
 Inde avidam partem montes, &c.

Which our Translatour has not rightly, or, at least, has doubtfully render'd. For what Lucretius says, is this; That as much of the World as the Heavens surround or cover, by which he means the Orb of the Earth, is partly taken up by Mountains, &c. and therefore is of no Use to Man. But Creech seems to make him complain, that no Creatures are produc'd in the Air, as well as in the Water, and on dry Ground. His Mistake proceeded from not enough considering what the Poet means by Cœli impetus ingens; the violent Whirl of the Heavens. Cicero, de Naturâ Deorum, lib. 2. Cum autem impetum cœli ad-

mirabili cum celeritate moveri, vertique videamus, &c.

226. The Torrid and Frigid Zones.] The Astronomers divided the Heavens, according to Latitude, into five Parts, each of which the Greeks call'd Ζώνη, and the Latines, Cingulum, Fascia, Plaga: Cicero calls the Zones, Maculæ, and Oræ: the Zone, that is in the Midst, between the two Tropicks, beyond which the Sun never passes, is call'd the Torrid Zone. Polybius divides this Zone into two, parted by the Æquator; but in this Opinion he is not follow'd by any. The two Zones, that are extended, one from the right of the Torrid Zone, towards the Arctick, or North Pole, and the other from the left of the Torrid Zone, towards the Antarctic, or South Pole, are call'd the Temperate Zones. The other two, included within the Polar Circles, are call'd the Frigid Zones. Thales is believ'd to have been the Inventour of them; but Possidonius, as cited by Strabo, ascribes the Invention, tho' without Reason, to Parmenides. These Zones are describ'd by Virgil, Georg. 1. v. 233.

Quinque tenent cœlum Zonæ:
 quarum una corusco

Semper sole rubens, & torrida
 semper ab igni:

Quam circum extremæ dextrâ
 lævaque trahuntur,
 Cæruleâ glacie concretæ, atque
 imbris atris.

Has inter mediamque, duæ mor-
 talibus ægris

Munere concessæ Divûm.

And all the other FIELDS, what would they breed,
 If let alone, but BRYARS, THORNS, and WEED?
 These are their proper Fruits, this NATURE would,
 230 Did not laborious MORTALS toil for Food;
 And tear, and plough, and force them to be good:
 Did they not turn the Clods with crooked Share,
 By frequent Torments forcing them to bear;
 No tender FRUITS, none of their own Accord
 235 Would rise to feed proud MAN, their fanſy'd LORD.

Nay

NOTES.

Five Girdles bind the Skies: the
 Torrid Zone
 Glows with the paſſing and re-
 paſſing Sun:
 Far on the right and left, th'
 Extreameſ of Heav'n,
 To Froſts, and Snows, and bit-
 ter Blaſts, are given.
 Betwixt the Miſt and theſe, the
 Gods aſſign'd
 Two habitable Seats for human
 Kind. Dryd.

And the ſame Aſtronomers like-
 wiſe aſſign'd five Zones on Earth,
 to anſwer to thoſe of the Hea-
 vens: and of theſe Ovid takes
 Notice, Metam. i. v. 45.

Utque duæ dextrâ cœlum, toti-
 demque ſiniſtrâ
 Parte ſecant Zonæ, quinta eſt
 ardentior illis:
 Sic onus incluſum numero di-
 ſtinxit eodem
 Cura Dei; totidemque plagæ
 tellure premuntur:
 Quarum quæ media eſt, non eſt
 habitabilis æſtu;
 Nix tegit alta duas: totidem in-
 ter utramque locavit,
 Temperiem dedit, miſtâ cum
 frigore flammâ.

Which the ſame Dryden thus in-
 terprets:

And as five Zones th' Ætherial
 Region bind,
 Five correſpondent are to Earth
 aſſign'd.

The Sun, with Rays directly
 darting down,
 Fires all beneath, and fries the
 middle Zone.
 The two beneath the diſtant
 Poles complain
 Of endleſs Winter, and perpetu-
 al Rain.
 Betwixt th' Extreameſ two hap-
 pier Climates hold
 The Temper, that partakes of
 Heat and Cold.

Nor was it amiſs obſerv'd by
 theſe Aſtronomers, that the
 Parts of the Earth anſwer'd to
 the oppoſite Parts of the Hea-
 vens, and partak'd of their Qua-
 lities: tho' ſo great has been the
 Wiſdom of God in attempering
 all Things, that even directly
 beneath the Sun, and where the
 Heats are moſt violent, both
 Men and Cattle may live a plea-
 ſant and eaſy Life: but of this
 the Antients were ignorant.

227. And all, &c.] In theſe
 9. v. is contain'd his ſecond Ar-
 gument, in which he obſerves,
 that the other Parts of the Earth,
 that are cultivated, will not
 produce the Fruits, unleſs the
 Ground be tilled by Men with
 great Toil and Labour: But if
 the Earth were created by the
 Gods, for the Service of Man,
 why does it not bear them Fruits
 of its own Accord?

236. Nay,

Nay, often too, when Man, with Pains and Toil,
 Has plough'd, and overcome th' unwilling Soil.
 When Flow'rs put forth, and budding Branches shoor,
 Look gay, and promise the much long'd-for Fruit,
 240 The scorching SUN, with his too busy Beams,
 Burns up, or CLOUDS destroy the FRUITS with Streams.
 Or, chill'd by too much SNOW, they soon decay,
 Or STORMS blow them, and all our Hopes, away.

But farther; why should Parent NATURE breed
 245 Such hurtful ANIMALS? why cherish, feed
 Destructive Beasts? Why should such MONSTERS grow,
 Did the kind GODS dispose of Things below?
 Why PLAGUES to all the Seasons of the Year belong?
 And why should hasty DEATH destroy the Young?
 250 A MAN, when first he leaves his prim'tive Night,
 Breaks from his Mother's Womb to view the Light:

Like

NOTES.

236, Nay, often, &c.] These 8. v. contain the third Argument, and say, that even when we expect to reap the Fruits of our Labours, in the Tillage of the Earth, we are often deceiv'd in our Hopes, either by Rains or Droughts, by Storms, Blights, &c. which is finely express'd by Sir R. Blackmore:

The verdant Walks their charming Aspect lose,
 And shrivel'd Fruit drops from the wither'd Boughs:
 Flow'rs in their virgin Blushes smother'd die,
 And round the Trees their scatter'd Beauties lie:
 Infection taints the Air; sick Nature fades;
 And suddain Autumn all the Fields invades;
 So when the Plains their flow'ry Pomp display,
 Sooth'd by the Spring's sweet Breath, and chearing Ray;
 If Boreas then, designing envious War,
 Musters his swift-wing'd Legions in the Air;

And, bent on sure Destruction, marches forth
 With the cold Forces of the snowy North:
 Th' op'ning Buds, and sprouting Herbs, and all
 The tender First-born of the Spring must fall;
 The blighted Trees their blooming Honours shed,
 And on their blasted Hopes the mournful Gard'ners tread.

244. But farther, &c.] in these 6. v. is contain'd the fourth Argument, in which the Poet observes, that noxious Animals are produc'd and fed, as well on dry Ground, as in the Sea: that the Seasons of the Year bring Diseases; that untimely Death snatches many away: To which Evils they ought not to be subject, if all Things were created for their Sake.

250. A Man, &c.] In these 16. v. he brings his fifth Argument. If the Gods, says he, had made the World, the Condition of Man would have been better than that of other Animals, yet we

Like a poor Carcass, tumbled by the Flood,
 He falls all naked, and besmear'd with Blood,
 An Infant, weak, and destitute of Food.
 255 With tender Cries the pitying Air he fills;
 A fit Presage for all his coming Ills:
 While Beasts are born, and grow with greater Ease;
 No need of sounding Rattles them to please;

No

NOTES.

we plainly see it is much worse: and, to weigh the Matter aright, Nature seems a kind Parent to them, and a cross Stepmother to us. Why, says Epicurus, in Lactantius, lib. 7. cap. 5. did God make Man, whom he lov'd, obnoxious to so many Evils? Why did he make him frail and mortal? Cur ergo Deus omnibus malis hominem, quem diligebat, objecit? Cur mortalem, fragilemque constituit? Man indeed comes into the World naked, helpless, and unarm'd: but Nature has given him the Advantage of Hands, which are call'd the Organ of Organs. Besides, let us suppose, that a great Estate were given gratuitously, and for no previous Consideration, to a Man that were Lame, mutilated, infirm and diseas'd, would it not be unjust to call the Donour to Account for the Infirmitiy of the Object of his Liberality, and to blame him that he gave no more?

255. With tender, &c.] Pliny, lib. 7. speaking of the Imbecillity of human Nature, says, *Hominem tantum nudum, & in nudâ humo natali die objecit ad vagitus statim & ploratus, nulumque tot animalium pronius ad lacrymas, atque has protinus vitæ principio.* Nature produces Man only naked, nor of the great Number of Animals is any more prone to Tears, and that too in the very Moment of his Birth. But let us hear Dryden's Translation of this Passage.

Thus, like a Sailor by the Tempest hurl'd

Ashore, the Babe is Shipwreck'd on the World:

Naked he lies, and ready to expire,

Helpless of all that human Wants require:

Expos'd upon unhospitable Earth,

From the first Moment of his hapless Birth;

Strait with foreboding Cries he fills the Room,

Too sure Presages of his future Doom.

But Flocks, and Herds, and ev'ry savage Beast,

By more indulgent Nature, are increas'd:

They want no Rattles for their froward Mood,

No Nurse to reconcile them to their Food

With broken Words; nor winter Blasts they fear,

Nor change their Habits with the changing Year:

Nor for their Safety Citadels prepare,

Nor forge the wicked Instruments of War.

Unlabour'd Earth her bounteous Treasure grants,

And Nature's lavish Hands supply their common Wants.

258. Sounding Rattles] Martial. lib. 14. Epig. 54.

Si quis plorator collo tibi vernula pender,

Hæc quatiat tenerâ garrula fistra manu.

Hence

No need of rattling Nurses busy Care:

260 They want no Change of Garments, but can wear
The same at any Season of the Year.

They need no Arms, no Garrison, or Town,
No stately Castles to defend their own,
NATURE supplies their Wants; whate'er they crave,

265 She gives them, and preserves the Life she gave.

But now, since AIR, and WATER, EARTH, and FIRE
Are Bodies all produc'd, and all expire;
Since these are such, these that compose this FRAME,
The NATURE of the WHOLE must be the same:

270 For those, whose PARTS the Strokes of Fate controul,
If those are made, and dy; so must the WHOLE.

Now since the MEMBERS of the WORLD we view,
Are chang'd, consum'd, and all produc'd anew:

It follows then, for which our Proofs contend,

275 That this VAST FRAME began, and so must end.

But lest you think I poorly beg the Cause;
And that it disagrees with Nature's Laws,

That

NOTES.

Hence we may observe, that the Rattles, which our Nurses use to quiet their froward Children, are not of modern Date; especially, if the *Crepitaculum*, which is the Word our Poet here uses, be the same with the *Sistrum*, that the Egyptians us'd in the Service of the Goddess *Isis*, as, by the Description *Apuleius*, *Metam.* lib. 11. gives of it, it seems to be: *Dexterâ quidem ferebat, says he, æreum crepitaculum, cujus per angustam laminam in modum baltei recurvatam, trajectæ mediæ paucæ virgulæ crispante brachio tergeminos jactus reddebant angustum sonorem.* And the Figure of *Isis*, holding a *Sistrum* in her Hand, which *Hieronimus Bossius*, de *Sistro*, p. 22. gives us, from some antient Coins of *Adrian*, represents it to be very much of the same Form with our common Rattles.

266. But now, &c.] Having solv'd the Objections, which the

Weakness of the Stoicks, and the Superstition of the Vulgar, had rais'd against his Opinion: he now, in these 10. v. argues to this Purpose: The Nature of the Whole is the same with that of its Parts: and since we see that the Parts of the World, the Earth, Sea, Air, and Fire, are continually chang'd, sometimes diminish'd, sometimes renew'd, it must be confess'd, that the whole Mass is equally, and alike, mortal.

268. This Frame] i. e. of the Earth, which is compos'd of the four Elements, that are call'd by *Manilius*, lib. 1. v. 137. *Quatuor mundi artus*; the four Limbs, or Members of the World: as they are likewise by *Lucretius*, v. 272. of this Book.

276. But lest, &c.] Here the Poet demonstrates at large, in 73. v. That the chief Parts, and largest Members of the World, Earth, Water, Air and Fire, are produc'd, and die. And first,
in

That WATER, AIR, that EARTH, and FIRE should cease,
 And fail ; that they can dy, and can increase ;
 280 Consider ; EARTH, when parch'd with busy Beams,
 And trodden much, flies up in dusky Streams :
 And little Clouds of thick'ning Dust arise,
 Dispers'd by Winds thro' all the low'r Skies:
 And gentle RIVERS too, with wanton Play,
 285 That kiss their rocky Banks, and glide away,
 Take somewhat still from the ungentle Stone,
 Soften the Parts, and make them like their own.
 And by what Thing another's fed, and grows,
 That Thing some Portion of its own must lose:
 290 Now since all spring from EARTH, and since we call,
 And justly too, the EARTH, the SOURCE of all ;
 Since all, when cruel Death dissolves, return
 To EARTH again, and she's both WOMB and URN:
 The EARTH is chang'd, some Parts must sometimes cease,
 295 And sometimes new come on, and she increase.

Besides,

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in these 20. v. he begins with the Earth: Many of whose Particles, says he, are borne aloft, and compose the Air: the Rivers wash off many more, and roll them into the Sea: Then, in 16. v. he says, That new Water is produc'd every Day; but Part of it is chang'd into Air by the Force of the Sun: and in the subterranean Passages another Part of it condenses, and puts on the Form of Earth. Then in 10. v. he says, That no Man will pretend, that the Air, which receives all the Particles, that are continually flowing to it from all Things, and that repairs and renews all those Things, is eternal and immortal: And lastly, in 27. v. he asserts, That we ought to conclude the like also of Fire, since the Rays of the Sun, who is the sole Fountain and Source of all Light and Fire, flow out from his Orb, and perish every Moment. And therefore we must be forc'd to allow, that the Sun himself is repair'd,

as we supply a Lamp with Oil, to keep the Flame alive,

280. Consider, &c.] Here the Poet proves, I. That the Earth wastes away, and is renew'd: For, says he, the Sun, by continually shining upon it, bakes and dries it up: it wears with being trampled on: the Force of the Winds blows some of it into the Air: Rains dissolve it: Rivers wash it away: it is wasted by its own Productions, and again renew'd by them: For, as the Earth is the great Mother of all Things, so too she is their common Sepulchre: The Earth therefore decays, and is renew'd.

284. And gentle, &c.] Our Translatour is not so much oblig'd to his Authour for this Thought as to Cowley, who, in the first Book of his Davideis, says:

— The Stream, with wanton Play,
 Kisses the smiling Banks, and glides away.

Besides; that SEAS, and RIVERS waste and die,
 And still increase by constant new Supply, (show,
 What need of Proofs? This STREAMS themselves do
 And in soft Murmurs bubble as they flow.

300 But lest the MASS of WATER prove too great,
 The SUN drinks some, to quench his nat'ral Heat:
 And some the WINDS brush off; with wanton Play,
 They dip their WINGS, and bear some Parts away:
 Some passes thro' the EARTH, diffus'd all o'er,
 305 And leaves its SALT behind in ev'ry Pore;
 For all returns, thro' narrow Channels spread,
 And joins where'er the FOUNTAIN shews her Head;
 And thence sweet STREAMS in fair MEANDERS play,
 And thro' the Valleys cut their liquid way;

And

NOTES.

296. Besides, &c.] In these 16. v. the Poet proves, II. dly, That the Water wastes away, and is again repair'd: for the Sea, the Rivers, and the Fountains, are continually supply'd with new Waters; and the Reason why the Sea does not overflow, is, because the Winds, brushing over the Surface of its Waves, take away some Part of its Flood, and because the Heat of the Sun continually licks up its Waters: Besides, some Part of the Waters of the Sea dives beneath into the Pores and Channels of the Earth: where, leaving behind its Bitterness and Salt, it gropes out its blind Passage to a second Birth; and starting up in Fountains, creeps from them into Rivers, and from the Rivers works its way, and returns again, into the Sea, gliding backwards and forwards with a never-ceasing Course.

305. And leaves it's Salt, &c.] Lucretius himself gives the Reason of this, Book II. v. 451.

For when salt Streams through winding Caverns pass,
 They rise up sweet, and bubble o'er the Grass;

Because those pungent Parts, they roll'd before,
 Now stay behind, and lodge in ev'ry Pore.

308. In fair Meanders play] Mæander is a great River of the lesser Asia, flowing from the Fountain Aulocrene, in the greater Phrygia: It divides Caria from Ionia, and, at the City Heraclea, falls into the Myrtoan Sea, which is a Part of the Ægean, and now call'd Mare di Mandria, This River is now the Madre, and flows in so many Windings, that it often seems to run back towards its Head: Ovid. Metam. lib. 9. v. 449.

Hic tibi, dum sequitur patriæ curvamine ripæ,
 Filia Mæandri, toties redeuntis eodem,
 Cognita Cyanæe, &c.—

Whence, not only all Turnings and Windings are metaphorically call'd Meanders: but likewise all crafty and wily Counsels: In which last Sense, Cicero, in Piso, uses the Word Mæander: and Prudentius, in the Hymn ante Somn.

310 And HERBS, and FLOW'RS on ev'ry Side bestow:
 The FIELDS all smile with FLOW'RS, where'er they flow:
 But more; the AIR, thro' all the mighty Frame,
 Is chang'd each Hour, we breathe not twice the same;
 Because, as all Things waste, the Parts must fly
 315 To the vast SEA of AIR; they mount on high,
 And softly wander in the lower Sky:
 Now did not this the wasting Things repair,
 All had been long ago dissolv'd, all AIR.

There-

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O tortuose serpens,
 Qui mille per Mæandros,
 Fraudesque flexuosas,
 Agitas quæta corda.

Dion Prusæus says, that this River makes no less than six hundred Windings towards the Spring where first it rises. Thus

It's wanton Tide in wreathing
 Volumes flows,
 Still forming reedy Islands as it
 goes:

And in Meanders to the neigh-
 b'ring Main,
 The liquid Serpent draws it's
 silver Train.

Sir Richard Blackmore.

Moreover, the four Verses that conclude this Argument, are paraphrastically render'd; and the two last of them seem to be imitated from these of Cowley:

Th' innocent Stream, as it in Silence goes,
 Fresh Honours, and a suddain
 Spring bestows,
 On both its Banks, to ev'ry Tree
 and Flow'r.

312. But more, &c.] In these 10. v. he proves Illdly. of the Air, that it sometimes wastes, and then again increases: For the Air is chang'd every Moment: Because, whatever flows from

Bodies, is carry'd into the vast Tract of Air. But minute Corpuscles are continually flowing from all Things, and are convey'd into the Air, where they fly to and fro without ceasing. Now, unless the Air constantly restor'd these Corpuscles to the Bodies from whence they came, all Things would by this Time have been wasted to Nothing, and totally destroy'd. Therefore Bodies are perpetually chang'd into Air, and the Air returns again into Bodies.

315. Vast Sea of Air] This seems a bold Metaphor; and yet has the Authority of Lucretius; *Aeris in magnum fertur Mare*: and he of Ennius, who, in Festus, says, *Crassa pulvis oritur; omne pervolat coeli Fretum*. And our Cowley not only calls the Air, a trackless Ocean; but the Sea, the low Sky: for which, he tells us, he has the Authority of the Scripture it self: *Genes. i. v. 6. Let there be a Firmament in the Midst of the Waters, and let it divide the Waters from the Waters*: The Passage of Cowley, of which I am speaking, is in that incomparable Pindarick Ode, which he calls *The Muse*; and the rather deserves to be transcrib'd, because he reclaims the Authority of our Poet, to justify one Part of his Allegory:

Where

Therefore, since all Things waste, their vital Chain
 320 Dissolv'd; how can the Frame of AIR remain?
 It rises from, and makes up, Things again. }

Besides; the SUN, that constant SPRING OF LIGHT,
 Still cuts the Heav'ns with STREAMS of shining WHITE;
 And the decaying old with new supplies:
 325 For ev'ry Portion of the Beam, that flies,
 Is but short-liv'd, it just appears, and dies. }
 As thus 'tis prov'd.—

For, when an envious CLOUD stops up the STREAM,
 The constant STREAM OF LIGHT, and breaks the BEAM,
 330 The lower Part is lost, and dismal SHADE
 O'erspreads the Earth, where'er the CLOUD's convey'd.
 There-

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Where never Fish did fly,
 And with short silver Wings cut
 the low liquid Sky;
 Where Bird with painted Oars
 did ne'er
 Row thro' the trackless Ocean of
 the Air, &c.

322. Besides, &c.] In these 27.
 v. he proves, IVthly, That Fire
 perishes, and is again renew'd:
 Of this he brings an Instance of
 the Sun, whose first Light, says
 he, totally perishes, and a new
 Light is created in its Place:
 This Truth we know by Expe-
 rience, as often as any Mist in-
 terposes between the Sun's Orb
 and us. He farther teaches, That
 the like happens in our Lamps
 and Candles, in Lightning, in
 the Moon, and in the other Pla-
 nets; of all which the first Light
 dies, and a new Light is conti-
 nually substituted in its Room:
 Therefore Light, in which there
 is always some Fire, dies, and is
 renew'd in all luminous Bodies,
 and consequently the Fire it self
 must perish, and be renew'd
 likewise. And indeed, as to our
 Lights, which are supply'd and
 fed with something fat and hu-
 mid, as Oil, no Man disputes,
 but that they are continually

chang'd. But Aristotle, lib. 2.
 Meteor. denies, that the Light
 of the Sun is like our terrestrial
 Lights: and will have it to be
 always one and the same, as be-
 ing never fed with Humidity;
 for otherwise, a new Sun would
 rise every Day, and be daily new,
 which is both false and absurd.
 Lucretius indeed, in this Place,
 does not pretend to say, that the
 Sun or the Stars are of a fiery
 Nature, or that they are Fire;
 but is satisfy'd that Light, which
 always contains some Fire, peri-
 shes, and is renew'd daily. He
 will prove by and by, whether
 the Sun be Fire or not; and, ac-
 cording to the Doctrine of Epi-
 curus, will teach, that the cele-
 stial Bodies, that is to say, the
 Stars, are either Fire, or consist
 of Fire: which he has likewise
 often insinuated elsewhere.

328. For when, &c.] Sir Ri-
 chard Blackmore, describing a
 Storm:

A suddain Storm did from the
 South arise,
 And horrid black begun to hang
 the Skies:
 Low-bellying Clouds soon inter-
 cept the Light,
 And o'er the Sailors spread a
 noon-day Night.

Therefore there must be constant STREAMS of Rays,
 Since ev'ry Portion of the BEAM decays:
 Nor should we see, but all lie blind in Night,
 335 Unless new STREAMS flow'd from the SPRING of LIGHT:
 So from our LIGHTS, our meaner FIRES below,
 Our LAMPS, or brighter TORCHES, Streams do flow,
 And drive away the NIGHT: they still supply
 New FLAMES; as swiftly as the former die,
 340 New BEAMS still tremble in the lower Sky:
 No Space is free, but a continu'd RAY
 Still keeps a constant, tho' a feeble, DAY;
 So fast, ev'n HYDRA-like, the fruitful Fires
 Beget a new Beam, as the old expires.
 345 So SUN and MOON, with many a num'rous Birth,
 Bring forth new RAYS, and send them down to Earth,
 Which die as fast: lest some fond Fools believe,
 That these are free from Fate, that these must live.
 Ev'n strongest Tow'NS and ROCKS, all feel the Rage
 350 Of pow'rful TIME: ev'n TEMPLES waste by AGE:
 Nor can the GODS themselves prolong their Date,
 Change NATURE's Laws, or get Reprieve from FATE:
 Ev'n

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343. Hydra] See the Note on v. 28. of this Book.

349. Ev'n strongest, &c.] In these 11. v. he confirms the preceding Arguments. The Things that seem most solid, feel the Strength of Time, and moulder away. Who does not every Day see Towers, Temples, and the Images of the Gods falling to Decay, and dropping to the Ground? The Deities themselves can not support them. Even Rocks crumble with Age, and come tumbling piecemeal down from the Mountains: Who then will pretend, that Things, which are unable to resist the Injuries of a finite Time, have existed from all Eternity?

351. Nor can the Gods, &c.] For some are of Opinion, that the Antients believ'd, That not only Man, and all created Things, as well animate as inanimate Be-

ings, but that even the Gods themselves were subject to Fate. And the Words of Lucretius, in this Place, are,

Nec sanctum Numen Fati pro-
 tollere fines
 Posse, neque adversus naturæ fœ-
 dera niti.

But if the Decrees of Fate were unalterable, how came Venus to fear, that the Mind of Jupiter would change, in regard to the Trojans? Virgil, *Æn.* i. v. 241.

— Quæ te, genitor, senten-
 tia vertit?
 Hoc equidem occasum Trojæ,
 tristesque ruinas
 Solabar, fatis contraria fata re-
 pendens.

Fate therefore seems to have been nothing else, than an immuta-
 ble

Ev'n TOMBS grow old, and waste, by Years o'erthrown :
Mens Graves before, but now become their own.

355 How oft the hardest Rock dissolves, nor bears
The Strength but of a few, tho' pow'rful, Years!

Now

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ble Series of Things and Events, existing in the Mind, or in the Decrees of Jupiter, and which, for that Reason, he alone knew, and alone reveal'd to the Gods by his own Mouth, and to Men by Oracles. Thus the Fortune-telling Harpy, *Æn.* 3. v. 251.

*Quæ Phœbo pater omnipotens,
mihi Phœbus Apollo
Prædixit,——*

To which I add, that the Antients did indeed hold Fate to be unalterable, and unavoidable; *Fata viam invenient*: but in such a Manner nevertheless, that they believ'd, I. That the Event of Fate, tho' it could not be wholly prevented, might nevertheless be somewhat retarded: Thus Juno, *Æn.* 7. v. 315.

*Non dabitur, esto, regnis prohibere Latinis:
At trahere, atque moras tantis licet addere rebus.*

II. That the Event often depended on certain Conditions, which being eluded, Fate was eluded likewise. III. That the Declaration of any Fate whatever, whether by Jupiter himself, or by the Oracles, might be ambiguous: whence it happen'd, That the Gods, as well as Men, often struggled against adverse Fates. And this it was that Venus fear'd; that Jupiter had not spoken sincerely of the future Happiness of *Æneas*: because, if he had, she knew, that it was unalterable, and must of Necessity happen: For, as Dryden, in

Palamon and Arcite, says after Chaucer,

The Pow'r, that ministers to
God's Decrees,
And executes on Earth what he foresees,
Call'd Providence, or Chance,
or fatal Sway,
Comes with resistless Force, and
finds, or makes its Way.

353. Ev'n Tombs grow old,
&c.] *Juvenal*, *Satyr.* 10. v. 142.
to the same Purpose, says,

—— *Patriam tamen obruit olim
Gloria paucorum, & laudis titulique cupido
Hæfuri in saxis cinerum custodibus, ad quæ
Discutienda valent sterilis mala robora ficus:
Quandoquidem data sunt ipsis quoque fata sepulchris.*

Which Dryden has finely paraphras'd:

Yet this mad Chace of Fame, by
few pursu'd,
Has drawn Destruction on the
the Multitude:
This Avarice of Praise in Times
to come,
These long Inscriptions, crowded
on the Tomb,
Should some wild Fig-tree take
her native Bent,
And heave below the gawdy
Monument,
Would crack the marble Titles,
and disperse
The Characters of all the lying
Verse;

For

Now if that Rock, for infinite Ages past,
 Stood still secure, if it was free from waste;
 Why should it fail, why now dissolve at last?

360 Lastly, look round, view that VAST TRACT OF SKY,
 In whose Embrace our EARTH and WATERS lie:
 Whence all Things rise, to which they all return,
 As some discourse; the same both WOMB and URN:
 'Tis surely MORTAL all: for that which breeds
 365 That which gives Birth to other Things, or feeds,
 Must lose some Parts; and when those Things do cease,
 It gets some new again, and must increase.

But grant the WORLD eternal, grant it knew
 No Infancy; and grant it never new;

Why

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For Sepulchres themselves must
 crumbling fall
 In Times Abyss, the common
 Grave of all.

Moreover, that the Graves of
 Men should come to be their own
 Graves, is a Thought added to
 Lucretius by his Translatour.

360. Lastly, &c.] In these
 8. v. he confutes those, who hold,
 That all Things proceed from
 Æther, or Heaven, and are re-
 solv'd again into Heaven, and
 yet assert, that Heaven it self is
 immortal and eternal: For
 whatever is chang'd into other
 Things, and is repair'd and re-
 new'd by those Things, when
 they are dissolv'd, must be born,
 and mortal.

363. As some discourse] He
 means the Poets, who feign'd,
 that Cœlus was the most antient
 of all the Gods, and that he mar-
 ry'd his Sister Terra, the Earth;
 whence he was believ'd to be the
 Father of all Things.

368. But grant, &c.] In these
 17. v. he asserts, that the World
 is new, because the most antient
 of all Histories, reach not far-
 ther than the Theban, or Trojan
 Wars; and certainly, if the
 World, far from being eternal,

were much older than we know
 it to be, we should have had
 some Records of a much older
 Date: And farther, because all
 the Arts are but of late Invention,
 since Mention is made of the
 Founders of all of them. And if
 the World had had no Beginning,
 all Arts, but especially those use-
 ful to Life, would have existed
 from all Time. Macrobius, on
 the Dream of Scipio, Book 2.
 chap. 10. argues to the same
 Purpose, in these Words, Quis
 non hinc existimet mundum
 quandoque cœpisse, nec longam
 retro hujus ætatem, cum abhinc
 ultra retro duo annorum millia
 de excellenti rerum gestarum
 memoriâ ne Græca quidem ex-
 tat historia? Nam supra Ninum,
 à quo Semiramis secundum quos-
 dam creditur procreata, nihil
 præclarum in libris relatum est:
 Si enim ab initio, imo ante initi-
 um fuit mundus, ut Philosophi
 volunt, cur per innumerabilium
 seriem sæculorum, non fuerat
 cultus, quo nunc utimur, inven-
 tus? Non literarum usus, quo
 solo memoriæ fulcitur æternitas?
 Cur denique multarum rerum
 experientia ad aliquas gentes re-
 centi ætate pervenit? Ut ecce;
 Galli vitem, vel cultum oleæ,
 Roma

370 Why then no WARS our POETS Songs imploy,
 Before the Siege of THEBES, or that of TROY?
 Why former HEROES fell without a Name?
 Why not their BATTELS told by lasting FAME?

But

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Roma jam adolescente, didicerunt: aliax verò gentes adhuc multa nesciunt, quæ nobis inventa placuerunt. Hæc omnia videntur æternitati rerum repugnare, dum opinari nos faciunt, certo mundi principio paulatim singula quæque cœpisse. Who can believe but that the World had a Beginning, and that too not long ago, since, of what happen'd above two thousand Years past, we have no History, not even of any great Actions: For before Ninus, who, according to some, was Father of Semiramis, nothing memorable is recorded in our Books: And if the World was from the Beginning, or, as Philosophers say, before the Beginning; why, during a Succession of innumerable Ages, was not the Method and Way of Life, which we now follow, invented? Why not even the Use of Letters, which alone secures and eternizes the Memory of Things? And why have some Nations had but a late Knowledge of many Things? For Instance, the Gauls, who knew not to till the Vine, nor the Olive, till Rome was in her Age of Adolescence. And other Nations are still ignorant of many Arts and Inventions, that have long been in Use, and of great Advantage to us. All which seems to contradict the Eternity of Things, and gives us great Ground to believe, that all Things began by Degrees, after the World had its Beginning.

371. The Siege of Thebes] Which, says Macrobius, was before the Siege of Troy. Howe-

ver it could be but a little Time before, because it is certain, that some Leaders were at the Destruction of Troy, whose Fathers had been at the Siege of Thebes. Faber. There were several Cities call'd by the Name of Thebes; but Lucretius speaks of that in Bœocia, which, as Isidorus says, was built by Cadmus, and of the War between the two Brothers, Eteocles and Polynices, the Sons of OEdipus, by his own Mother Jocasta. Of the Trojan War, see B. I. v. 519.

372. Why former Heroes, &c.] Horace seems to give the Reason of this, when he says, that in the Ages, in which those Heroes liv'd, there wanted Poets to record their Fame:

Vixere fortes ante Agamemnona
 Multi: sed omnes illacrymabiles
 Urgentur, ignotique longâ
 Noctē; carent quia vate sacro.

And therefore Cowley excellently well, says:

Not Winds to Voyagers at
 Sea,
 Nor Show'rs to Earth more necessary be,
 Than Verse to Virtue, which
 can do
 The Midwife's Office, and the
 Nurse's too:

It feeds it strongly, and it cloaths
 it gay;

And when it dies, with
 comely Pride
 Embalms it, and erects a Pyra-
 mid,

That never will decay,
 Till Heaven it self shall melt
 away,

And nought behind it stay.
 And

But 'tis as I declare ; and thoughtful MAN,
 375 Not long ago, and all the WORLD began :
 And therefore ARTS, that lay but rude before,
 Are polish'd now, we now increase the Store,
 We perfect all the old, and find out more.
 SHIPPING's improv'd ; we add new OARS and WINGS ;
 380 And MUSICK now is found, and speaking Strings.
 These Truths, this Rise of Things we lately know ;
 Great EPICURUS liv'd not long ago :
 By my Assistance young PHILOSOPHY
 In LATINE Words now first begins to cry.
 385 But if you think successive WORLDS, the same
 They now appear, but EARTHQUAKES shook the Frame,
 Or FIRE destroy'd, or FLOODS swept all away ;
 Grant only this, and you the Cause betray :
 This strongly proves the WORLD will once decay :

For

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And Dryden in like manner :

For ev'n when Death dissolves
 our mortal Frame,
 The Soul returns to Heaven,
 from whence it came ;
 Earth keeps the Body ; Verse
 preserves the Fame.

374. But 'tis, &c.] It is not strange that Arts are new, that they are but lately improv'd and refin'd, that is to say, Sailing, Poetry, Musick, &c. since the World it self is but of late standing, and was not from Eternity, as the Stoicks and Aristotle erroneously believ'd.

383. By my Assistance, &c.] Lucretius has several times already been telling us this of himself : but more particularly, Book I. v. 933. and at the Beginning of the fourth Book.

385. But if, &c.] To these Arguments some Philosophers give this Answer : The same Arts flourish'd heretofore that do now : But sometimes Fire destroy'd Mankind, sometimes Deluges swept them away, or Earth-

quakes swallow'd them up : and hence those Arts seem to be new : The Poet retorts this Answer upon them, in these 10. v. and says, That no Man of sound Judgment will pretend, that the World, whose Parts are sometimes consum'd by Fire, sometimes overwhelm'd with Waters, and sometimes shaken and swallow'd up by Earthquakes, can be eternal : For the Reason, why we believe a Man to be mortal, is, because he is subject to, and attack'd by, those Diseases, which, having seiz'd upon others with greater Violence, have swept them away. But Aristotle, on the contrary, says, that there is no Fear of the World's being dissolv'd ; nay more, that the Deluges and Conflagrations of the Earth conduce to the Safety of the whole Universe ; for he held the World to be eternal ; which Doctrine of his is not only repugnant to the Christian Faith, but likewise to the Opinion of almost all the Philosophers.

387. Or Fire destroy'd, or Floods swept all away ;] The Poet

et

- 390 For what can sicken thus, can waste, and fail,
And perish all, if stronger Strokes prevail.
For thus, since we can feel the same Disease,
Same Harms, that other perishing Things do sieze,
We think, that we shall die as well as these. }
- 395 Besides : whate'er's IMMORTAL, must be so,
Because 'tis SOLID, 'bove the Pow'r of Blow ;
Whose Parts no Wedge divides, which know no Pore ;
And such are SEEDS, as I explain'd before:
Or else because, like EMPTY SPACE, 'tis such
- 400 As is secure from STROKE, and free from TOUCH !
Or else, because it can admit no BOUND,
'Tis INFINITE, and knows no Place beyond,
To which the SEEDS may sink : This makes the ALL
ETERNAL ; there's no Place where SEEDS may fall,
- 405 And breed Confusion here : No SPACE does lie
Without the WHOLE, to which the PARTS may flie, }
And leave the mighty ALL to waste and die.
But now the WORLD'S NOT SOLID, ev'ry Mass
Contains, between the SEEDS, some EMPTY SPACE :
- 410 Nor is't like VOID ; for thousand Things, if hurl'd
With mighty Force, can strike, and break the WORLD :
SEEDS rushing on, may bear some Parts away,
Like vi'lent Streams, and so the WORLD decay :
Besides, there's SPACE beyond, to which, the Tie
- 415 Of Union loos'd, the scatter'd Parts may fly : (dy ; }
Therefore these HEAV'NS and EARTH can waste, and }
And

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et alludes to the known Stories of Phaëthon, who is fabled to have set the World on Fire ; and of the Flood, that happen'd in the Days of Deucalion : The first of them may be seen at large in Ovid. Metam. lib. 2. and the other in the same Authour, lib. 1. See likewise below, v. 440. and v. 445.

395. Besides, &c.] In these 21. v. he brings the same Argument against the Immortality of the World, which, B. III. v. 776. he brought against the Immortality of the Soul : consult the Notes upon that Place. Nothing, says he, is eternal, or im-

mortal, except Bodies perfectly solid, as the Atoms ; except the Void, and the, τὸ πᾶν, Universe. But the World is not a Body perfectly solid : Nor is it void or empty Space ; nor, since there are infinite Worlds, can it be pretended, that it is the Universe.

406. To which the Parts may fly,] As if, for the Dissolution of any Thing, it were requisite, that it should go from Place to Place, or that Bodies should come from some exterior Place, and strike it with so great Violence, as to dissolve the Thing it self.

416. Therefore, &c.] In these 5. v. he draws, from the Arguments

And therefore once began ; for what can fail,
 And waste ; o'er what the Strokes of Fate prevail,
 Must be unable to endure the Rage
 420 Of infinite past Time, and Pow'r of Age.
 But lastly ; since th' ELEMENTS, at Jars,
 Still fight, are still engag'd in Civil Wars,
 Can not their Battels cease, their Wars be done,
 And all the other Parts submit to one ?
 425 The FIRE prevail, and, with destructive BEAMS
 Dry SEAS, the thirsty SUN drink up the STREAMS ?
 Which now he seems to try, but all in vain ;
 For RIVERS still bring new Supplies amain ;
 So fast, so great, as if design'd to raise
 430 A FLOOD, and o'er the CENTRE spread the SEAS :
 But that's in vain ; the WATERS still decay,
 The WINDS brush off, and bear, some Parts away ;
 The SUN drinks some ; the STARS take some for Food,
 And seem to threaten more a DROUGHT than FLOOD :

Thus

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ments he has brought already, this Conclusion : That since the World will have an End, it had a Beginning : and has not existed from all Eternity : for what is mortal, must of Necessity have been born.

To make this Disputation of our Authour more easy to be understood, it will not be improper to observe, that there are two Sorts of Eternity : from the present Time backwards, and from the present forwards ; which the Schoolmen call *Æternitas à parte ante*. and *Æternitas à parte post* : These two make up the whole Circle of Eternity, which the present Now cuts as a Diameter. Boetius de Consolat. Philosoph. lib. 5. defines Eternity, *Interminabilis vitæ tota simul & perfecta possessio* : The whole and perfect Possession at once, of a Being without Beginning or Ending : And this Definition is follow'd by Tho. Aquinas, and all the Schoolmen, who therefore call Eternity,

Nunc stans, a standing Now, to distinguish it from that Now, which is a Difference of Time, and always flowing.

421. But lastly, &c.] In these 40. v. he brings another Argument, from the continual Fighting of the Elements, which are the four chief Parts of the World : For, says he, since Fire engages with Water, and sometimes the Flame, sometimes the Flood prevails, what should hinder, but that this Contention will at last end in the Destruction of the whole World ? And that great Conflagrations and Deluges have happen'd, the Stories of Phaëthon and Deucalion sufficiently evince : for then the Earth was destroy'd by Fire, and overwhelm'd with Water ; and tho' the Poets foolishly fable, that the Fire, and the Deluge, broke out and ceas'd at the Intervention of the Gods, yet they were indeed only the Effects of natural Causes.

435. Thus

435 Thus they still fight, with equal Force maintain
The War; now conquer, and now yield again.

Yet FIRE, as Stories go, did once prevail,
And once the WATER too was spread o'er all.

The FIRE prevail'd, when the SUN's furious Horse,
440 Disdaining PHAETHON's young feeble Force,
Ran thro' the Sky in an unusual Course;
And, falling near the Earth, burnt all below,
'Till angry Jove did dreadful Thunder throw,
And quench'd the hot-brain'd fiery YOUTH in Po.

But

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435. Thus they, &c.] Milton describes admirably well this Fighting of the Elements, and perhaps took the Hint from Lucretius.

For Hot, Cold, Moist, and Dry,
four Champions fierce,
Strive here for Mast'ry; and to
Battel bring
Their Embryon Atoms: They
around the Flag
Of each his Faction, in their fe-
veral Clans,
Light-arm'd, or heavy, sharp,
smooth, swift, or slow,
Swarm populous; unnumber'd
as the Sands
Of Barca, or Cyrene's torrid Soil,
Levy'd to side with warring
Winds, and poise
Their lighter Wings. To whom
these most adhere,
He rules a Moment, &c.

Which a late Authour has hap-
pily imitated:

The heavier Seeds rush on in nu-
m'rous Swarms,
And crush their lighter Foes
with pond'rous Arms:
The lighter strait command with
equal Pride,
And on mad Whirlwinds in wild
Triumph ride:
None long submits to a superiour
Pow'r;
Each yields, and, in his Turn, is
Conquerour.

440. Phaëthon] He was the Son of Clymene and Sol, the Sun: And with much Importunity obtain'd of his Father, to drive his Chariot for one Day; but not being able to guide the Horses, they went out of the Road of their daily Course, and set Fire to the World: Jupiter struck him with his Thunder, and he fell into the River Eridanus. The Fable is related at large by Ovid, Metam. 2. Plato, in his Timæus, explains the Meaning of this Fable, in Words to this Effect: What is commonly reported among us, says he, that in Times long since past, Phaëthon, the Son of Sol, having obtain'd Permission to drive his Father's Chariot, and mistaking the right Road, set Fire to the Earth, and that he was struck down, and kill'd with Lightning, is said only figuratively, or by Way of Fable: but signifies the Mutation or Decay, as well of earthly Things, as of those that are in the Heavens, and are moved with the Heavens: As also that Destruction, which, in a long Interval of Time, is made of all Bodies that are on the Earth, by the violent Assaults of the Element of Fire. And thus too Aristotle, lib. 4. de Mundo.

444. Po] The Greeks call'd it *Ἡεῖδαρος*, the Latines, Padus, now the Po: a River of Italy,

- 445 But *PHŒBUS* gather'd up the scatter'd *RAY*,
 And brought to Heav'n again the falling *Day* :
 The *HORSES* too, that ran thro' *HEAVN'S* wide *Plain*,
 He caught, and harness'd to the *COACH* again :
 They ever since, in due *Obedience*, drew
 450 The flaming *Carr*. This *GREECE* reports as true,
 Yet 'tis absurd : But all may yield to *FLAME*,
 If great *Supplies* of rapid *Matters* came
 From the *VAST MASS* : for then those *SEEDS* must fail,
 And sink again, or *FIRE* must ruin all.
 455 *SEAS* once prevail'd, nor could the *Towns* withstand
 The raging *Waves* : they spread o'er all the *Land* :

But

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that rises in the Alps, at the Foot
 of the Mountain *Vesulus*, now
Monte Viso, and dividing the
Cisalpine Gaul, which is now a
 Part of *Italy*, into the *Transpa-*
duan and *Cispaduan Gauls*, dis-
 gorges it self, at several Mouths,
 into the *Hadriatick Sea*. *Virgil*
 calls it the *King of Rivers*, be-
 cause it is the largest *River* of
Italy. *Georg. i. v. 481.*

Proluit infano contorquens vor-
tice sylvas
Fluviorum Rex Eridanus——

And, *G. 4. v. 372.* he describes it at
 the Spring from whence it flows :

Et gemina auratus taurino cor-
nua vultu
Eridanus; quo non alius per pin-
guia culta
In mare purpureum violentior
influit amnis.

There *Po* first issues from his
 dark *Abodes*,
 And, awful in his *Cradle*, rules
 the *Floods* :
 Two golden *Horns* on his large
 Front he wears,
 And his grim *Face* a *Bull's Re-*
semblance bears :
 With rapid *Course* he seeks the
 sacred *Main*,
 And fattens, as he runs, the
 fruitful *Plain*.

445. *Phœbus*] Of *Phœbus* see
B. I. v. 816.

447. The *Horses* too] The
Horses of the *Sun*, of which we
 have spoken above, *v. 86.*

451. But all, &c.] What *Lu-*
cretius here says, is this : The
 old *Greek Poets* report this for
 Truth, tho' indeed it is but an
 idle Fiction : Not but that it is
 possible that *Fire* may destroy all
 Things, if an immense Quantity
 of *Corpuscles*, of a fiery Matter,
 were brought down upon the
 Earth, out of the Infinite Space :
 for in that Case, unless the Pow'r
 and Force of that igneous Matter
 be weaken'd, repress'd, and kept
 under by some Means or another,
 all Things will be burnt, and pe-
 rish with too much Heat.

455. *Seas* once prevail'd] Here
 the Poet alludes to the fabulous
 Flood of *Deucalion*, which, no
 Doubt, took its Rise from the
 true Flood of *Noah*, related in
 the *Mosaical History*, of which
 it can not be question'd, but
 some Copies were got among the
 Heathens : and as they drew the
 Occasion of many of their Fa-
 bles from those sacred Writings,
 so too they wretchedly profan'd
 them by their foolish Fictions :
 but none has suffer'd more, in
 passing thro' their Hands, than
 this Flood of *Noah*; which ha-
 ving

But when the num'rous Seeds, the mighty Mass
Supply'd, were turn'd from this into another Place,
The Water ceas'd, and the continual Rain:
460 And Rivers ran within their Banks again.

Now

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ving furnish'd Matter of Speculation to many of our Christian Philosophers, who have puzzled their Brains to give a rational and intelligible Account of it; I presume it will not be taken amiss, that I here make a short Digression, to give our Translator's Opinion concerning that Deluge: He observes, in the first Place, That the Authour of the Theory of the Earth, pleads for a universal Flood, it being inconsistent with the demonstrated Nature of a Fluid, that Water should stand up in Heaps, fifteen Cubits above the Tops of the highest Mountains: This, says Creech, I am willing to admit, tho' there is no Reason, why Omnipotence might not be immediately concern'd in it; since the Authour of the Theory himself confesses, That the forty Days Rain can not, according to his Hypothesis, be explain'd by any natural Cause that he can discover. In the next Place, that Authour compares the Height of the Mountains, and the Depth of the Sea; and having, as to both, made allowable Suppositions, tho' the Course of the largest River, even the Nile it self, will not prove its Head to be above three Foot higher than its Mouth, he infers, that eight Oceans will be little enough to make an universal Deluge: The Waters above the Firmament are exploded; the Rain would afford but the hundredth Part of such a Mass of Water, unless the Showers were continual, and over the Face of the whole Earth, and the

Drops came down ninety times faster than usually they do: Though a Man would be apt to think, from the Expressions in Genesis, The Windows of Heaven were open'd, that there was something very extraordinary in this Rain, and that all those requir'd Conditions were observ'd. The Caverns of the Earth, if they threw out all the Water they contain'd, would afford but little, in Comparison of the great Store that was requir'd: And if the whole middle Region of the Air had been condens'd, still there had not been enough; because Air, being turn'd into Water, fills only the hundredth Part of that Space, which it formerly possess'd. Though all the other Ways, by which some have endeavour'd to explain the Flood, were demonstrably insufficient, yet this last, which gives an Account of it, from so natural and easy a Cause of the Condensation of the Air, deserv'd to be consider'd a little more: But it is the Art of a Disputer, to touch that least, which presses most on the Opinion he would advance. For it being allow'd, that Air, by natural Causes, may be chang'd into Water; and a Vacuum being excluded, it necessarily follows, that as much Air, as rises fifteen Cubits higher than the Tops of the Mountains, is sufficient to make such a Deluge, as is describ'd to have been in Noah's Time: Because where there is no Vacuum, there can be no Contraction into a less Space: and every Particle of Matter, whatever Form or Schematism it puts

Now I will sing, how moving SEEDS were hurl'd,
 How toss'd to ORDER, how they fram'd the WORLD :
 How SUN and MOON began ; what steady Force
 Mark'd out their Walk ; what makes them keep their
 465 For sure unthinking SEEDS did ne'er dispose (Course :
 Themselves by COUNSEL, nor their ORDER chose :
 Nor

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puts on, must, in all Conditions, be equally extended, and therefore take up the same Room. But suppose a Vacuum, or, as it happens in our imperfect Condensations, that a hundred cubical Feet of Air would make but one Foot of Water ; yet sure the Region is large enough to make Amends for this Disproportion. Now since Nature is sufficient for Condensation; and since its Pow'rs may be considerably invigorated for the Execution of the Almighty's Wrath, why must it be thought so difficult to explain a Deluge ! And why should an excellent Wit waste it self in fashioning a new World, only to bring that about, which the old one would permit easily to be done ? It is above the Province of Philosophy to make a World : let that be suppos'd to have been form'd as it is reveal'd ; it is enough for us to search by what Laws it is preserv'd ; and a System, erected on this Foundation, will be agreeable both to Reason and Religion. It is above the Province of Philosophy likewise, to assign a natural Cause of a supernatural Effect : But the prying Minds of some Men will, with their short-lin'd Plummets, be sounding into the unfathomable Depths of the Divine Dispensations : How much better they, who, firmly believing that there was such a Flood as that of Noah, describ'd to us in Holy Writ, ascribe it meerly to Omnipotence ?

Commanded by whose Breath,
 th' obsequious Main
 Stood still, and gather'd up its
 flowing Train :

Th' Almighty did the Sea
 divide,

And, as he rends the Hills, he
 split the Tide :

Benumb'd with Fear, the Waves
 erected stood,

O'er-looking all the distant
 Flood :

Mountains of craggy Billows did
 arise,

And Rocks of stiffen'd Waters
 reach'd the Skies ;

Remoter Waves came rousing
 on to see

The strange transforming
 Mystery :

But they, approaching
 near,

Where the high Chrystal Ridges
 did appear,

Felt the divine Contagion's
 Force ;

Mov'd slothfully awhile, and then
 quite stopt their Course.

Sir R. Blackmore.

461. Now, &c.] In these 29.v. The Poet, being about to explain how the World began, excludes the Gods and Providence from having any Hand in it ; and ascribes the whole Work to Matter, from whence proceeded Chaos, a rude and undigested Heap of Particles, which, being driven to and fro, at length came together, like with like, and thence arose the Heaven, the Earth,

Nor any Compacts made, how each should move;
 But from eternal, thro' the VACUUM, strove,
 By their own Weight, or by external Blows,
 470 All MOTION's try'd, to find the best of those,
 All UNIONS too; if, by their various Play,
 They could compose new Beings any Way:
 Thus long they whirl'd, most Sorts of MOTION past,
 Most Sorts of UNION too, they join'd at last
 475 In such convenient Order, whence began (MAN:
 The SEA, the HEAV'N, and EARTH, and BEASTS and
 But yet no glitt'ring SUN, no twinkling STAR,
 No HEAV'N, no roaring SEA, no EARTH, no AIR, }
 Nor any Thing like these did then appear:

But

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Earth, the Sun, the Stars, and whatever else this World contains. This Doctrine of Epicurus is deliver'd by Plutarch, de Placit. Philosoph. lib. 1. c. 4. in these Words: 'Ο τοίνυν κόσμος σωῖται περικεκλασμένω χημαλί ἐχημαλισμένῳ τῷ τρόπῳ τῆτον, τῶν Ἀτόμων σωμάτων, ἀπρηνότητων, ἢ τυχαίαν ἐχόντων κίνησιν, συνεχῶς τε, ἢ τάχιστα κινημένων, εἰς τὸ αὐτὸ ποικίλ' σωματά σπινθηροῖσιν, ἢ ἀπὸ τῆτο ποικιλίαν ἔχοντα ἢ χημάτων ἢ μεγεθῶν.

477. But yet, &c.] Macrobius Saturnal. lib. 6. cap. 2. compares this Passage of Lucretius with the following Verses of Virgil, in Silenus, v. 31.

Namque canebat uti magnum
 per inane coacta
 Semina, terrarumque, animæque,
 marisque fuissent,
 Et liquidi simul ignis: ut his
 exordia primis
 Omnia, & ipse tener mundi concreverit orbis.
 Tum durare solum, & discludere
 Nerea Ponto
 Cœperit, & rerum paullatim sumere formas:

Namque novum ut terræ stupeant
 lucefcere solem;
 Altius atque cadant submotis nubibus imbres:
 Incipiant sylvæ cum primum
 furgere, cumque
 Rara per ignotos errent animalia
 montes.

Which is thus interpreted by Dryden:

He fung the secret Seeds of Nature's Frame:
 How Seas, and Earth, and Air,
 and active Flame
 Fell thro' the mighty Void; and
 in their Fall
 Were blindly gather'd in this
 goodly Ball!
 The tender Soil, then stiff'ning
 by Degrees,
 Shut from the bounded Earth
 the bounding Seas:
 Then Earth, and Ocean various
 Forms disclose,
 And a new Sun to the new World
 arose:
 And Mists, condens'd to Clouds,
 obscure the Sky,
 And Clouds, dissolv'd, the
 thirsty Ground supply:

The

480 But a vast HEAP, and from this mighty Mass
 Each Part retir'd, and took its proper Place :
 Agreeing SEEDS combin'd ; each ATOM ran,
 And sought his like, and so the FRAME began :
 From disagreeing SEEDS the WORLD did rise,
 485 Because their various MOTION, WEIGHT, and SIZE,
 And FIGURE would not let them all combine,
 And lie together ; nor friendly Motions join :
 Thus SKIES, and thus the SUN first rais'd his Head,
 Thus STARS, thus SEAS o'er proper places spread.
 490 For first the EARTHY PARTS, a heavy Mass,
 And closely twin'd, possess'd the MIDDLE PLACE.

Now

N O T E S.

The rising Trees the lofty
 Mountains grace ;
 The lofty Mountains feed the
 savage Race,
 Yet few, and Strangers in th'
 unpeopled Place.

480. And from this mighty Mass, &c.] The Poet here teaches, That so long as the Atoms were jumbled confusedly one among another, neither Earth, nor Heaven, nor Stars had yet a Being : But when the chief Parts of the World began to disjoin, and get clear from each other, then the Heaven shone with Splendour, the dry Ground appear'd, the Waters were gather'd into one, &c. Thus Lucretius will have all Things to have begun by little and little, not only by Reason of the sundry Impediments of the Concourse of the Atoms, but also because of their different Figures : Whence, says he, it is evident, that the World has not existed from all Eternity. He is now going to dispute, separately, of the first Rise of each Part of it.

490, 491. For first, &c.] In these 32. v. he discourses of the Rise of the Earth, of the Heaven, and of the Sun, Moon, and Stars. And since the confus'd and unfashion'd Mass of Matter, must

have been brought into Order by Motion, and since all Motion proceeds from Weight, the Poet is in the right to inquire what the heaviest Atoms must do. Now Epicurus believ'd, that the Atoms, being embroil'd, and confus'd in a Heap together, did, by their innate Motion, roul and tumble up and down, among one another, till, at length, all the more dense Atoms, jumbled towards the Middle, and all the more rare, being extruded and squeez'd away by the thicker, flew towards the Circumference. Moreover, that of these thicker Atoms the Body of the Earth was compacted, and that it contain'd within its Bulk some Seeds of Water, which had not been able to disentangle themselves and get away, at the same time with the others : But that some of those, that had disentangled themselves, did, by Reason of their various Degrees of Tenuity, retire to several Distances ; thus some of them stopt not far from the Mass of Earth, and made the Air : that others mounted yet more aloft, and compos'd the Sky : and that the fiery Corpuscles, that were extruded with the rest, getting clear of all of them, combin'd into those Bodies that shine in the Sky,

Now as these heavy PARTS combin'd more close,
 Descending still, they vext with constant Blows
 The lurking PARTS of SEA, of STARS, and SKIES,
 495 And SUN; and squeez'd them out, and made them rise;
 Because those SEEDS are subtile, more refin'd,
 And round, and smooth, and of a lesser Kind
 Than those of EARTH; and so can freely pass
 The subtile Pores of the descending Mass.
 500 And thus the PARTS of HEAV'N did first retire,
 And bore up with them num'rous SEEDS of FIRE:

As

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Sky, and are call'd Stars. Lastly, That the lesser, round, smooth Corpuscles were so determined, limited, and confin'd to that Motion towards the Circumference, that was made by Elision, or by Expression from the more dense Corpuscles, that, forasmuch as they went not out of the Mass by parallel Ways, they did, in the very Progression, variously encounter one another, and mutually repel'd the Violence they receiv'd: which Violence at length ceasing, those that were got farthest, or most remote from the Centre, became entangled with one another, and mutually compressing each other, and holding fast together, did, by that Means, create a certain Species of the Walls of the World: And whatever Corpuscles came to them there, were turn'd back, and repress'd from them in such a Manner, that still, new Supplies coming up, the whole etherial, or celestial Region was aptly made and fabricated by them. This perhaps will be better understood, by the Comparison Lucretius himself uses to explain it, when he shews, that this might very well happen, in like manner as when Vapours and Exhalations steam out of the Earth and Water, and, being carry'd aloft, are there condens'd, and grow into one Body of

Clouds, so as to make, as it were, a Cieling, under which the Air, that remains visible to us, is contain'd. See Plutarch, de Placit. Philosoph. lib. i. c. 4. 491. The middle Place] Tho' Epicurus and Lucretius plac'd the Earth in the Midst of the World, yet they deny'd the Earth to have any Centre, or middle Place, as we have seen, Book I. v. 1071. & seqq. Thus too Manilius, speaking of the Earth, lib. i. v. 167. places it in the Midst of the Universe:

*Imaque de cunctis mediam tenet
 undique sedem;
 Idcircoque manet stabilis, quia
 totus ab illâ
 Tantundem refugit mundus, fe-
 citque cadendo
 Undique, ne caderet: medium
 totius & imum est:
 Ictaque contractis consistunt cor-
 pora plagis,
 Et concurrento prohibent in
 longius ire.*

Lowest of all, and in the Midst
 it lies,
 Compass'd by Seas, and cover'd
 by the Skies:
 The Place does fix it, for, still
 rising higher,
 The other El'ments equally re-
 tire,

As when the SUN begins his early Race,
 And views the joyful Earth, with blushing Face,
 And quaffs the pearly Dews, spread o'er the Grass;
 505 From EARTH he draws some MISTS with busy Beams,
 From wand'ring WATERS some, and running STREAMS:
 These thin, these subtile MISTS, when rais'd on high,
 And join'd above, spread CLOUDS o'er all the Sky:
 Just to the Parts of HEAV'N did upward move,
 510 The subtile *ÆTHER*, thus combin'd above:
 And vastly wide, and spread o'er ev'ry Place,
 Contains the rest within her kind Embrace: (SUN;
 Thus HEAV'N: then rose the MOON, and STARS, and
 Which thro' the Sky with constant Motions run:

Because

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And that, by falling, stops its
 farther Fall,
 And hangs the midst and low-
 est of them all:
 Its Parts to no one Point press
 jointly down,
 And meet, and stop each other
 from moving on. Creech.

See the Note on Book II. v. 562.

502. As when, &c.] Dryden,
 in one of his Descriptions of the
 Morning, has express'd this
 Thought of Lucretius:

—The Sun arose, with Beams
 so bright,
 That all th' Horizon laugh'd to
 see the joyous Sight:
 He, with his tepid Rays, the
 Rose renews,
 And licks the dropping Leaves,
 and dries the Dews.

Palam. & Arc.

513. Thus Heav'n, &c.] Ha-
 ving made the Earth, as the
 Foundation of the whole World,
 and the Sky, the Walls of it, as
 he himself calls it; he, in these
 9. v. places the Sun and Moon,
 which are of a middle Nature,
 between the Sky and the Air, as
 being compos'd of Principles
 lighter than those of the Air,

and heavier than those of the
 Sky, in the very Confines of the
 Air and Sky, where, he tells us,
 they are in perpetual Motion, as
 the Lungs and Hearts in Ani-
 mals. He takes no Notice of the
 other Planets or Stars, tho' his
 Translatour does. But let us hear
 the best of Poets, and a Christi-
 an Philosopher, describing this
 Part of the Creation. He speaks
 in the Person of an Angel:

—I saw the rising Birth
 Of Nature from the unapparent
 Deep;

I saw, when at God's Word, this
 formless Mass,
 The World's material Mould
 came to a Heap:

Confusion heard his Voice, and
 wild Uproar

Stood rul'd: stood vast Infini-
 tude confin'd;

'Till, at his second Bidding,
 Darkness fled,

Light shone, and Order from
 Disorder sprung:

Swift to their sev'ral Quarters
 hasted then

The cumbrous Elements, Earth,
 Flood, Air, Fire;

And the ethereal Quintessence of
 Heaven

Flew upward, spirited with va-
 rious Forms,

That

515 Because their SEEDS were all too light to lie
 In Earth, not light enough to rise on high,
 And pass the utmost Limits of the Sky;
 But, plac'd between them both, the MIDST controul,
 Certain, but moving Portions of the WHOLE:

520 Just as in MAN, some Parts refuse to cease
 From Motion, some still lie dissolv'd in Ease.

These Things retir'd, the heavier Parts of CLAY
 Sunk farther down, and made an easy Way
 For flowing STREAMS, and CAVERNS for the SEA:

And

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That roul'd orbicular, and turn'd
 to Stars:

Each had his Place appointed,
 each his Course.

Thus GOD the Heav'ns crea-
 ted, thus the Earth,

Matter uniform'd and void:
 Darkness profound

Cov'rd th' Abyss; but on the
 wat'ry Calm

His brooding Wings the Spirit
 of GOD outspread,

And vital Virtue infus'd, and
 vital Warmth

Throughout the fluid Mass; but
 downwards purg'd

The black, tartareous, cold, in-
 fernal Drugs,

Adverse to Life, then founded,
 then conglob'd

Like Things to like; the rest to
 several Place

Disparted, and between spun out
 the Air;

And Earth, self-balanc'd, on her
 Centre hung.

Milton.

522, 523. These, &c.] But the
 Work is not yet perfect: we have
 hitherto neither Fire, Air, nor
 Water. He tells us therefore, in
 these 15.v.first, That that feculent
 Mass, that sunk together to the
 Bottom, being press'd on all
 Sides by the Beams of the Sun,
 and the Heat of the Sky, contra-
 cted it self: Thence exhal'd the
 Sea like Sweat: but the lighter
 Particles, mounting higher, com-
 pos'd the Elements of Fire and

Air: In the next Place, that
 some of the Particles of this
 Mass being more hard and stiff
 than the others, they did not all
 subside alike, and hence the hol-
 low Places to receive the Sea, and
 the Channels for the Rivers;
 and hence too the Level of the
 Plains, and the Turgidness of
 the Mountains.

———— The Mountains huge
 appear

Emergent, and their broad bare
 Backs up-heave

Into the Clouds; their Tops as-
 cend the Sky:

So high as heav'd the tumid
 Hills, so low

Down sunk a hollow Bottom,
 broad and deep,

Capacious Bed of Waters; thi-
 ther they

Hasted with glad Precipitance,
 up-roul'd,

As Globes on Dust, conglobing
 from the Dry;

Part rise in crystal Walls, or
 Ridge direct;

———— As Armies, at the Call
 Of Trumpet, ———

Troop to their Standard; so the
 wat'ry Throng,

Wave rousing after Wave, where
 Way they found;

If steep, with torrent Rapture,
 if through Plain,

Soft ebbing: nor withstood them
 Rock or Hill:

525 And as, by constant Blows, the vig'rous SUN
 Did strike the upper Parts, and press them down,
 More Moisture rose; and then did STREAMS increase:
 More Parts were still squeez'd out, and swell'd the SEAS:
 More ÆTHER then, of AIR more Parts did rise,
 530 And borne on high, there thicken'd into SKIES:
 The MOUNTAINS rais'd their Heads; the humble FIELD
 Sunk low; the stubborn STONES refus'd to yield;
 The Rocks did proudly still their Height maintain,
 Nor could all sink into an equal Plain.
 535 Thus EARTH at first was fram'd; and thus did fall
 The lowest, as the Sediment of all. (Mafs,
 Thence SEAS, thence AIR, thence ÆTHER, ev'ry
 Distinct from others, took its proper Place;

All

NOTES.

But they, or under Ground, or
 circuit wide,
 With serpent Errour wand'ring
 found their Way,
 And on the wat'ry Ooze deep
 Channels wore,
 Within whose Banks the Rivers
 now——
 Stream, and perpetual draw
 their humid Train. Milton.

523. Sunk farther down, &c.]
 Lucret.

Succidit & falso suffudit gurgite
 fossas.

Plutarch. de Placit. Philosoph.
 lib. 3. καὶ ὡς τὸ ὕδωρ ἐπι-
 σὰν ἐκοίλανε τὰς ὑποκειμένης τό-
 πους. And the same Authour, lib.
 1. cap. 4. de Placit. Philosoph.
 expresses this Opinion of Lucre-
 tius more at large: Of those
 Bodies, says he, which sunk
 down, and settled below, was made
 the Earth; that Part of it which
 was most subtile, and of a thinner
 Form and Consistence, gather'd
 round together, and engender'd
 the Element of Water: which,
 being of a liquid and flowing
 Nature, ran downwards to hol-
 low Places, that lay low, and
 were capable to receive and hold
 it.

529. Æther] The Firmament,
 the celestial Spheres, the Hea-
 vens. They were call'd Æther, ἄν-
 τὴ ἀὴρ ἰεῖν, from their being in
 perpetual Motion.

537. Thence Seas, &c.] That
 he may the better explain the
 Motions of the Stars, he previ-
 ously teaches, in these 14. v. that
 the most resplendent and liquid
 Æther, having mounted higher
 than the inconstant and turbu-
 lent Air, is wholly undisturb'd
 by any manner of Storms, and
 rolls in a constant and like Moti-
 on: which Motion of the Æther
 is not in the least incredible,
 since the Euxine Sea does the
 like, and is continually flowing
 into the Propontick, without
 changing its Course.

Thence Æther] Lucr. inde
 Æther ignifer ipse. For the An-
 tients believ'd the Stars to be ei-
 ther very Fire, or of a fiery Na-
 ture, and therefore call'd the Æ-
 ther ignifer, Fire-bearing; as
 they did likewise signifer, or stel-
 lifer, that bears the Signs, or
 Stars. Or else the Poet, in this
 Place, describes the Region of
 Elementary Fire, which lies next
 under the Heaven, as Manilius
 sings, in these excellent Verses:

Ignis

All FLUIDS, and all differently light,
 540 And therefore reach'd the less, or greater Height.
 Then liquid *ÆTHER* did the farthest rear,
 And lies on softest Beds of yielding AIR :
 But yet its Parts ne'er mix, whilst WINDS do blow,
 And rapid STORMS disturb all here below:
 545 They undisturb'd move round the steady POLE :
 And SUN, and STARS, with constant MOTION roll:
 For that by constant Turns the SKY may move,
 The constant Motions of the WATERS prove :
 This Thing the mighty Mass, the OCEAN, shows ;
 550 For that, at settled Hours, still ebbs and flows.

Now

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*Ignis in ætheræas volucer se sustulit auras,
 Summaque complexus stellantis culmina cœli,
 Flammæ vallo naturæ mœnia fecit.* lib. i. v. 144.

Upward the Flame on active Pinions fled,
 To Heaven's high Arch it rais'd its shining Head ;
 There stopt, as weary grown, and round the Frame,
 For Nature's Bulwark, rais'd a Wall of Flame. Creech.

545. The steady Pole] The Point of the Axle-tree, on which Astronomers imagine the Heaven to be turn'd. There are two Poles, the North Pole, known by a Star call'd *Polus Arcticus*; and the South, call'd *Antarcticus*, which is invisible to us. The Word Pole, comes from *πολεῖν*, to turn. They are likewise call'd, *cardines cœli*, The Hinges of the Heaven; because it being hung upon them, like a Door on its Hinges, is roul'd and turn'd about.

547. For that, &c.] Here our Translatour has mistaken the Sense of his Authour, who speaks not of the Flux and Reflex of

the Ocean, but of the Course of the Euxine Sea. For how can that Motion of the Ocean be alledg'd as a parallel Instance to confirm the one, regular, and constant Motion of the Spheres? The Words, in the Original, are as follows :

*Nam modicè fluere, atque uno posse æthera nifu,
 Significat Ponti mare, certo quod fluit æstu,
 Unum labendi conservans usque tenorem.*

Now what led our Translatour into his Errour, was, in all Appearance, his having follow'd the Reading of this Passage in the first Edition of Lambinus, in which we read *magnum*, instead of *Ponti*: *Significat magnum mare, &c.* but that Critick corrected it in his subsequent Editions, and reads *Ponti mare*. *Fayus* however retains the other Lection, and ridiculously pretends to justify it: But certainly, whatever that Interpreter alleges to the contrary, the constant Course of the celestial Circles, is better prov'd by the constant Motion of the Euxine Sea into the Bosphorus of Thrace, thence into the Propontis, the Hellespont, &c. without any Reflex,

Now learn what moves the STARS, what mighty Force

Does drive them on; what LAWS confine their COURSE :
First; If the ORB is mov'd, and whirls, and draws
The SUN about; then this may be the Cause :

555 Vast TRACTS of AIR the distant SKIES do bound,
And with a close Embrace encircle round;

The upper Part of that drives down the SKIES
From EAST to WEST; the under makes them rise;
And so the Whirl's perform'd. Thus oft a FLOOD

560 Turns round a WHEEL, and whirls the weighty Wood.
Or else the ORBS may lie at Rest above,
Steady and fixt, and only STARS may move;

Because

NOTES.

flux, than by the ebbing and flowing of the Ocean. This is so obvious, that to assert the contrary, as Fayus does, seems next to an Absurdity.

551. Now learn, &c.] Lucretius, when he disputes of the Heavens, of the Motions of the Spheres, and of those Things which the Greeks call, *μετέωρα*, Meteors, never affirms any thing for certain: This was the constant Custom of the Epicureans, who thought they discharg'd admirably well the Part of natural Philosophers, if they assign'd only any possible Causes of the celestial Motions: Our Poet does the like in these 28. v. If, says he, the whole Orb be mov'd; then there may be two Airs, one that may press from above, and drive it down to the West: and another, that may be said to bear and lift it up from beneath: If the Orb be motionless, then some rapid Particles of the Sky, struggling to get into the Empty Space; and not able to force their Way, and break thro' the strong Walls of the World, are whirl'd about, and drag the

Stars with them: Or some external Air rushes in, and turns them about: Or, lastly, the Stars move forward of themselves, in Search of proper Food to keep alive their Fires.

Cleanthes, in Cicero de Natura Deorum, lib. 2. alledging Reasons to evince the belief of a Deity, urges, for the last and most weighty, *Æquabilitatem motûs & conversionis*, &c. The Equability of the Motion and Conversion of the Heavens, Sun, Moon, and Stars: and their Distinction in Variety, Beauty, and Order. The very Sight of which, says he, sufficiently declares them not to be fortuitous or casual. For what can be more evidently perspicuous, when we behold and contemplate the Heavens, than that there is a God, by whose excellent Providence they are govern'd? Thus Cicero, who, from the bare Suggestion of Nature, discover'd the Truth of what our obdurate Poet, by Arguments drawn from the Contemplation of Nature, endeavours to disprove.

OF THE FIXED STARS.



LUCRETIIUS, treating in this Place of the Stars, and their Motions, affords us an Opportunity to say something of those glorious and splendid Bodies: The Astronomers distinguish them into two Sorts: The fixed Stars, and the Erratick, which last are likewise call'd the Planets: of these we will give a short Account by and by, when our Authour comes to treat of the Sun, Moon, &c. and will here confine our Inquiries only to the first Sort, which are called, The fixed Stars, because they always observe, at least to us they seem to do so, the same invariable Distance from one another, and from the Ecliptick: Hence the Sphere, in which they are believ'd to be plac'd, is term'd, ἀπλάνη, inerrans, because of the inviolable Order observ'd in their Intervals or Distances from one another. The chief Things to be consider'd of them, not as they are reduc'd into Signs and Constellations, with which we shall not meddle, but shall take Notice of them only as they are distinct and several mundane Bodies, disseminated and dispers'd through the immense Space of the Ethereal Region, which we call Heaven: The chief Things, I say, that deserve our Observation, are,

I. Their SUBSTANCE; concerning which the Antients differ in Opinion: Zoroaster held them to be of a fiery Substance, and so too did the Stoicks: The Egyptian Philosophers, as Diogenes Laertius, in Proœm. has recorded their Opinion, believ'd, τῆς ἀσέρας πῦρ εἶναι, ἢ τῇ τέτων κράσις τὰ ἐπὶ γῆς γίνεσθαι, that the Stars are Fire, and that by their Contemperation all Things are produc'd on the Earth. In Orpheus the Sun, Moon, and Stars, are call'd, Ἡφαίσιοι μέλη, the Members of Vulcan. Thales held the Stars to be both of an earthy and fiery Substance. Empedocles maintain'd them to be fiery, and to consist of that very Fire which the Æther contain'd in itself, and struck out at its first Secretion: The Opinion of Anaxagoras deserves to be mention'd,

tion'd, for no other Reason, than because it is extravagantly ridiculous: for he affirm'd, That the ambient Æther, being of a firy Nature, does, by the impetuous Swiftness of its Motion, whisk up Stones from the Earth, and that they, being set on Fire, become Stars, and are carry'd from East to West: Diogenes would have them to be of the Nature of Pumice Stones set on Fire, and that they are as the breathing Holes, and Nostrils of the World, by which it draws in its Breath. Xenophanes, That they are Clouds, set on Fire in the manner of Coals, and that they are extinguish'd by Day, and at Night rekindled. Heraclides and the Pythagoreans believ'd each Star to be a particular World by it self, existing in the infinite ethereal Space, and containing an Earth, an Air, and a Sky: and this Opinion is found in the Works of Orpheus: For his Followers affirm'd the Stars to be so many distinct and individual Worlds. Plato held them to consist chiefly of a firy Nature, but such, as to admit the Mixture of other Elements, as it were, in the Nature of a Cement to compact and hold them together. Aristotle, and his Followers, assert them to be of the same Substance with the Heavens, but only more condens'd; and that they are simple Bodies, without the Mixture of any Elements. Pliny, and many others, believe them to be compos'd of the same Matter as Exhalations and Vapours, and consequently to consist of a Substance partly aqueous, partly aerial. Of all these Opinions, the most probable is, that the Stars are firy Bodies: This was the Sentiment of the antient Christian Church, which, in Hymn. *Feria secunda ad Vesper.* of which Hymn St. Ambrose is said to be the Author, sings as follows,

Immenſe cœli conditor,
 Qui mixta ne confunderent
 Aquæ fluenta dividens,
 Cœlum dedisti limitem,
 Firmans locum cœleſtibus,
 Simulque terræ rivulis,
 Ut unda flammas temperet;
 Terræ ſolum nec diſſipent, &c.

Where we find the Reason, why the Waters are plac'd above the Heavens, viz. to restrain and temper the excessive Fervour of the Sun and Stars. And again; in Hymn. *Fer. quarta ad Vesper.* the same Church sings,

Cœli

Coeli Deus sanctissime,
Qui lucidum centrum poli
Candore pingis igneo.

And of the same Opinion are most of the Fathers, not only of the Latine, but of the Greek Church likewise. Cyrillus Hierosolym. Cæsareus, Theodoretus, D. Chrysostom, Gregor. Nyssen. Procopius, and Anastasius Sinaita, all of them positively assert the Stars to be of a firy Nature; and with them agree Tertullian, St. Ambrose, St. Augustine, Arnobius, Lactantius, Anselmus, Alcuinus, Beda, &c. Besides, many of the eminent modern Philosophers and Astronomers concur in the same Opinion: Induc'd therefore by all these Authorities, we may reasonably conclude, That the Stars are compound, not simple Bodies; that they are compos'd of elementary Matter, form'd into firy Globes; that they consist of solid and liquid, as this terraqueous Globe of ours; and consequently, that they are subject to Alteration and Corruption.

II. Their LIGHT: whether it be innate, and the Gift of the Almighty at their Creation: or mutuatitious, and borrow'd from the Sun: which last is the Opinion of Metrodorus, in Plutarch, de Placit. Philosoph. lib. 2. cap. 17. and with him agree many of the modern both Philosophers and Astronomers; and it is the Belief of some at this Day. The first Opinion however seems to be the most probable; and Macrobius, in Somn. Scip. lib. 1. cap. 19. asserts the Truth of it, in these Words: *Omnes stellas (scil. fixas) lumine lucere suo, quod illæ supra solem in ipso purissimo æthere sunt; in quo omne quicquid est, lux naturalis & sua est.* And this agrees with what we said before touching their firy Nature: For there can be no Fire without Light. And indeed it seems highly improbable, that the Sun can illuminate the fix'd Stars, since, as Bulialdus, in Astronom. Philolaic. lib. 1. cap. 11. observes, the Sun's Diameter, if it could be beheld from Saturn only, would appear too little, and afford too weak a Light sufficiently to illustrate even that Planet, much less therefore can it impart its Light to the fixt Stars, that are remov'd to so great a Distance beyond it. For this Reason some believe each of the fix'd Stars to be the Head and chief Part of a distinct mundane System; as the Sun is the Head and chief Part of our

Q q q

visible

visible System: And, as the Sun has several Planets, constituted and carry'd about him; so likewise every one of the fix'd Stars has other mundane Bodies, like Planets, dispos'd and moving around them; tho' they are invisible to us, by Reason of their great Distance from our Earth. And, according to this Opinion, Galilæo, Dialog. 3. System. Cosmic. makes no Scruple to assert, that each of the fix'd Stars is a Sun, exactly of the same Nature with, and perfectly resembling, this of ours; that it serves besides to illuminate the innumerable other Planetary and Lunary Bodies, within their respective Systems: and consequently is endow'd with innate and original Light. Several other of our modern Astronomers are of the same Opinion; among them Ricciolus, who, *Almagest. nov. lib. 6. cap. 2.* has these Words: *Mihi longe probabilior horum (scil. Brunni, Galilæi, Renati des Cartes, & Reithæi) opinio videtur, quia magis convenit opificis numinis majestati, ut non unicam stellarum à se ipsa lucentem, sed plures instar solis accenderet: Nec alium sui luminis fontem agnoscerent, quam omnium luminum patrem Deum.*

III. Their COLOUR: which visibly differs according to the Variety of their Light, as it is blended and attemper'd by the different Constitution of the Matter, or Substance, of which they are compos'd: for some appear to be of a ruddy, others of a leaden Hue: some of a Gold Colour, others of a silver white, others pallid, &c. whence some have pretended to form a Judgment of their several Natures, and accordingly have rang'd them under the several Planets, of whose Qualities they imagin'd them chiefly to partake; having Regard to the Proportion of Resemblance they bear in their Colours, to those of the Planets.

IV. Their SCINTILLATION: which particularly distinguishes them from the Planets, which have no such Vibration, or twinkling of Light; as generally is observ'd, more or less, in all the fix'd Stars, at one time more than at another; and most when the Wind is Easterly, as Schikardus in *Astrosop.* observes. Aristotle ascribes the Cause of their Scintillation to their Remoteness from our Sight; which Remoteness is the Reason, that our Eyes reach them but weakly, and with a trembling Lassitude. To this Opinion Pontanus, in *Urania*, lib. 2. assents, when he says,

Scilicet

Scilicet alta illis regio, sedesque repostæ,
 Quo postquam advenit defesso lumine visus,
 Defessus tremit ipse, tamen tremere ipsa videntur.

But this Reason is not convincing, since, if it were true, the Planets, Jupiter and Saturn, should, by Reason of their great Distance, in some measure affect our Sight with such a Trembling or Scintillation; and this we know they never do, even in their greatest Altitude. Others ascribe the Cause to Refraction, and imagine this Scintillation to arise from the unequal Surface of the fluctuating Air, or Medium, thro' which the Sight passes: in like manner, as Stones in the Bottom of a River, seem to have a tremulous Kind of Motion, which nevertheless is only the curl'd and uneven Undulation of the Surface of the Water. But if this Reason were true, we should not only in the fix'd Stars, but in the Planets, nay, even in the Moon, discover such a Scintillation. Gassendus, with more Probability, conceives it to proceed from their native and primigenial Light, which, like that of the Sun, sparkles, and ejaculates such quick-darting Rays, that our infirmer Sight can not look on them without trembling: To this we may add their impetuous and whirling Motion about their own Axis; by which there is caus'd a more suddain and quicker Variation in those fulgid Objects, than the Eye can pursue. But Scheinerus, in his Mathematical Disquisitions, positively dissents from this Opinion. The Scintillation of the Stars, says he, is not their proper Revolution or Convolution, not any interior exestuating Commotion; no tremulous revibrating of the Sun-Beams, proceeding from their first or second Motions; no unquiet or unequal Ejaculation of their proper Rays; no trembling of the weary'd Sight; not any, nor all of these, but only the Intercision of their several Species falling upon the Eye; which Intercision is caus'd by the unquiet Intercursion of Vapours variously affected. Hevelius, tho' he allow of their Circumgyration about their own Axis, yet he admits it only as an assisting, not as the sole, Cause of their Scintillation: which he imputes rather to a constant Evibration of lucid Matter, or a continual Expiration of fiery Vapours from those celestial Bodies; even, says he, as we perceive those Fulgurations and Ebullitions in the Body of the Sun, which, the grosser they are, and in the greater Plenty they are ejected, so

much the greater and more visible Scintillation they cause. These are the several Opinions concerning the Scintillation of the Stars.

V. Their NUMBER : which, according to the Computation of Ptolemy, including only those that are most remarkable and visible, and as they are reduc'd to the six commonly receiv'd Degrees of Magnitude, amounts to only 1022. And Pliny, lib. 2. cap. 4. reckons them to be 1600. But if we reflect on the Number of all the Stars in the Firmament, as we regard them by the Help of a Telescope, which discovers many more than the bare Eye can do, we may affirm them to exceed the Number of human Calculation : Jordano Bruno says, their Number is infinite. Ricciolus, speaking of the Number of the Stars, argues thus, That if the Constellation of Orion take up in the Heavens the Space of 500 square Degrees, as by Experience we know it does, and if every square Space, whose Side is but two Degrees, contains no less than 500 Stars, as Galilæo, by the Assistance of a Telescope, observ'd that it does, there will be found in the whole Constellation of Orion, at least 62500 Stars, tho' the bare Eye only can not discover in the whole above 63. According to which Proportion, if the rest of the Constellations were examin'd, and if the Difference of the Number of Stars, that appear by the Telescope, over and above those discern'd by the bare Eye, were computed, it would amount to above 1000000 Stars, beside those in the Milky Way : Nay, says Ricciolus, *Almagest. Nov. Tom. 1. l. 6. p. 413.* if any Man should reckon them above 2000000, the Number would not seem to me improbable, *Mihi quidem nihil inopinabile finxerit.* Some of the Rabbins of the Jews will not allow the whole Number of Stars to amount to above 12000 : but the Cabalists admit of no less than 29000 Myriads, which Number Schickardus believes too exorbitant ; and imagines, that the whole Extent of the Heavens, is not capable of receiving above 26712 Myriads, even though they were plac'd contiguous to one another : but as to this Particular of the Number of the Stars, we ought to agree with Schottus, who, in *Prælus. in Firmament. Itiner. Ecstatic. Kircheri, in Schol. 1.* says, That it is an Arrogance indeed intolerable, to believe that our Sight, how strengthen'd and assisted soever by the Help of Telescopes, can discover all the Stars in the Expanse of Heaven ; and an extream Piece of Folly, to pretend to include them within

within the Bounds of any Definite Number; that being the Work of the Almighty only, who alone numbers the Multitude of the Stars, and calls them all by their Names.

VI. Their **FIGURE**: which is apparently spherical or round: and yet Plutarch, de Placit. Philosoph. lib. 2. cap. 14. relates the different Opinions of the Antients, even as to this Particular: Cleanthes held them to be pyramidal, and that they end in a sharp Cone: Anaximenes would have them to be like Studs, or Nails, fix'd in the chrystal-line Firmament, like Jewels in a Ring. Others imagin'd them to be flat, and, as it were, fry and lucid Plates, as so many flat Pictures, not of any Thickness or Profundity. Scheinerus, and Antonius Maria de Reitha, will have them to be of divers Figures or Faces, of a poly-angular Shape; and such indeed the larger Sort of Telescopes represent them. Kepler, in Epit. Astronom. p. 498. describes them like so many lucid Points, or Sparkles, casting forth on all Sides their Rays of Light: insomuch that we are to take their Figure to be only physically spherical, not mathematically so: for tho', in the first Acceptation, they may be said to be round Bodies, yet, according to the later, their Surface may be found to be uneven, and to consist of many Angles, or Sides.

VII. Their **MAGNITUDE**: of which divers Calculations have been made by many eminent Astronomers; but to little Purpose: for so great a Diversity of Opinions has arisen among them, partly, because Authours can not agree as to the Distances of the Stars from the Earth, which is the suppos'd Centre of the World; and partly because of the different Estimates of their apparent Diameters, that have been made by the Eye, by Tycho Brahe, and other more antient Astronomers; and by Telescopes by the Modern: insomuch, that we ought ingenuously to acknowledge with Schickardus, that, *veras illarum magnitudines verè ignoramus*, we are indeed ignorant of their true Magnitude,

VIII. Their **PLACE** and **DISTANCE** from the Earth, or rather from the Sun: which is a Question so hard to resolve, that Pliny long ago pronounc'd it to be no less than a Piece of Madness to inquire into it: and Ricciolus, *Almagest. Nov. lib. 6. cap. 7.* treating of this Subject, has thought fit,

fit, in the Front of his Discourse, to lay it down as an undeniable Truth, That Men can not, by any certain and evident Observation, come to the true Knowledge of the Parallax and Distance of the fix'd Stars. For it is not known, whether the Stars are all in the same spherical Surface, equally distant from the Centre of the World; or whether they are plac'd at unequal Distances; that is to say, some higher, some lower, as the old Stoicks held them to be, supposing the Difference of their Lustre, and of their apparent Magnitude, to proceed from the Diversity of their Situation, according as they are more or less distant from our Sight: Thus Manilius, giving the Reason why some of the Stars in Orion appear more obscure than the others, says,

Non quod clara minus, sed quod magis alta recedunt.

And this Hypothesis has so great an Appearance of Truth, that the learned Astronomers, Tycho Brahe, Galilæo, and Kepler, readily embrace it. And thus we may reasonably suppose, that their Distances are as various as those of the Planets, and that it is scarce possible to discover their true Distance, because our short and feeble Sight, being unable to distinguish their various Intervals, judges them to be all plac'd in the same concave spherical Surface.

IX. Their PROPER MOTION: which is twofold: First, that of Circumrotation about their own Centre, around which they are whirl'd with wonderful Celerity; which, as we said before, is in Part the Reason of their Scintillation: and this Motion is call'd, *motus vertiginis*. Secondly, their MOTION OF REVOLUTION, from West to East: *secundum ductum Eclipticæ*, in which they are observ'd to move so very slowly, that they run not through one Degree in the Ecliptick sooner than in the Space of seventy one Years, nineteen Days and twelve Hours, within a Trifle: and they compleat not the whole Circle of 360 Degrees, in less than 25579 Years, which is the *Annus magnus Platonicus*; tho' the Antients computed it to amount to 36000 Years: And this great Platonick Year, which consists of 25579 Sydereal Years, is equal to 25580 equinoctial Years. And thus I have given a short Account of the most remarkable Observations touching the fix'd Stars.

Because the FIRES, confin'd to little Space,
Grow fierce and wild, and seek a larger Place,
565 And thus thro' the vast HEAV'N begin their Race.
Or else external AIR, or subtile WIND
May whirl them round : Or they may move to find
Their Nourishment ; and run where Food invites,
And kindly calls their greedy Appetites.

570 For true ; what single Force makes STARS to rise
And set ; what governs these our single SKIES
Is hard to tell : ———

And therefore I, how STARS may move, propose
A thousand Ways, and numerous as those :

575 And what may whirl the SUN, and pale-fac'd MOON,
In all the WORLDS ; but can not fix on one,
Altho' but one rules here ; but which that is
'Tis hard to point ; it may be that or this.

And that the HEAVY PARTS should end their Race,
580 And rest ; and EARTH possess the MIDDLE Place,
Its WEIGHT decay'd ; that Pow'r did weaker grow,
Because convenient Things were plac'd below,
That rose with it, to which 'tis closely join'd ;
By nat'ral Ties, and strongest Bands confin'd :

And

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571. Our single Skies] The Skies, and Stars, that we see move continually, and he calls them single, because the Epicureans held a Multitude of Worlds to be in the All, or Universe, and all of them, like this of ours, or even of a greater Extent.

579. And that, &c.] But since Lucretius so often mentions the great Weight of the Earth, it may well be inquir'd, why it hangs without Motion in the Air, and does not rather press downwards, and fall precipitately into the infinite Void ? To this the Poet answers in these 17. v. That tho' it have so happen'd, that the Air only is circumfus'd around the Earth, yet because both Air and Earth are bound by natural and kindred Ties, and from their very Beginning are Parts of the same Whole, the Earth is no Burthen

to the Air ; but having, in a Manner, laid aside all its Weight and Compression, it only sticks fast, and cleaves naturally to it : But it would not be so, if this Earth had been brought out of another World ; for, in that Case, it would press heavy upon this Air with its Weight ; even as our Bodies feel a little Weight that is not a Part of them, tho' neither the Head, nor the other Members are burdensome to one another, because they are mutually congenial, and bound to one another by a general and common Band. Epicurus to Herodotus says, τὸ γῆν πρὸς αἶρα ἐποχῆσθαι, ὡς συγχεῖν. See the Note on Book II. v. 562.

584. By natural Ties] Aristotle will not allow, that the Earth is therefore suspended in the middle of the Air, because it is congenial, and, as it were, of a Piece with

585 And thus it softly rests, and, hanging there,
 Grows light, nor presses down the LOWER AIR.
 Just as in MAN, the NECK the HEAD sustains,
 The FEET the WHOLE; yet not one Part complains
 Of pressing Weight; neither is vex'd with Pains:
 590 Yet other WEIGHTS impos'd we strait perceive,
 Tho' lighter far, contract our Limbs, and grieve.
 [Such vast Import from sim'lar Parts does spring,
 When one is aptly join'd t' another Thing.]
 So EARTH was fashion'd in its proper Place:
 595 Not made, then thrust into the strange Embrace
 Of diff'rent AIR, but with the WORLD began;
 A certain PART of it, as LIMBS of MAN.
 Besides; the SHAKING EARTH does often move
 The upper AIR, disturbing all above:
 600 Which could not be, unless the strongest Tie
 Did closely join the EARTH, the AIR, and SKY.

Thin

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with it, as Epicurus believ'd, but says the Reason is, because it is the heaviest of all the Elements. And Plato, in Phædon. will have the Equability of the Earth it self, to be the Cause of its Station in the Middle of the Universe: According to whose Opinion, Ovid. Metam. l. v. 12. says,
*Et circumfuso pendebat in aëre tellus
 Ponderibus librata suis.*—

And our Milton in like manner:

The Earth, self-balanc'd, on her Centre hung.

592. Such vast, &c.] This and the following Verse we have inserted to fill up a Lacuna, which Creech, having totally omitted this Verse of his Authour,

Usque adeo magni refert, cui quæ adiaceat res,

had left in all the former Editions of this Book.

598. Besides, &c.] In these 4. v. he brings another Argument of the Connexion of the Earth and Air: Because, says he, the Thunder, that causes violent Motions in the Air, makes the Earth tremble, which it could not do, but that they are of a Piece.

Here our Translatour seems to have imperfectly render'd the Sense of his Authour, whose Words are,

Prætereà grandi Tonitru concussa repentè

Terra, supra quæ se sunt, concutit omnia motu.

Quod facere haud ullâ posset ratione, nisi esset

Partibus aëriis mundi cœloque revincta.

i. e. Besides, the Earth, when ever it is shaken, on a suddain, by a violent Thunder, makes every Thing that is upon it, shake and tremble: Which it could by no means do, unless, &c. Compare this with Creech's

Trans-

Thin subtile SOULS, 'cause closely join'd, do prop
 The mighty WEIGHT of LIMBS, and bear it up :
 What raise the LIMBS in leaping, what controul,
 605 And guide their Motion, but the subtile SOUL ?
 Which shews the weighty Force of Things refin'd,
 When ty'd to others of a grosser Kind ;
 As AIR to EARTH, to our gross LIMBS the MIND.

But farther on : the SUN and MOON do bear
 610 No greater HEATS, nor FIGURES than appear;

Because

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Translation, and see his Error.

602. Thin, &c.] But because it may seem wonderful, that so subtile a Body as the Air, should support a Mass, so vastly thick as the Earth ; he adds in these 7. v. that the Soul, which is a most subtile Substance, sustains our ponderous Body : nay, not only that, but even lifts it up, and makes it leap from the Ground.

604. What raise ——— what controul,] Where we must understand the Word Things : An Ellipsis, too frequently us'd by Creech, tho' hardly allowable in our Language, which hates all grammatical Figures, and loves to speak plain. What, without a Substantive, is always in the singular Number : What raises, what controuls. Sed hoc obiter.

609. But farther, &c.] Epicurus, in the tenth Book of Laërtius, speaking of the Magnitude of the Sun and Stars, says : that in as much as it relates to us to judge of it, their Magnitude is the same that it appears to be : and that as to the Thing itself, it is somewhat bigger, or somewhat less, or else exactly the same that it seems : inasmuch that our Eyes lie very little, if they do at all. The Poet in these 27. v. asserts the same thing, and endeavours to prove his Assertion by an Argument taken from

Sense : As we retire from any Fire, so long as we are within such a distance of it, that we can perceive its Light and Heat, the Fire seems no less than it does when we are near it : But we feel the Heat, and perceive the Light of the Sun : Therefore the Sun is of the same Magnitude it seems to be : Then he adds of the Moon, that we distinctly see the outmost Verge and face of it : And yet we should see it but confusedly, if it were so far off, that its Distance took away any of its Magnitude : Lastly, he says of the Stars, that they are not much larger, nor much less, but rather just as big as they seem ; for even the Fires that we see here below at distance from one another, either by Day, or by Night, present to our Eyes the like variety of Sizes. Epicurus writes the very same Doctrine to Pythocles.

Thus neither Epicurus, nor Lucretius after him, affirm'd any thing for certain concerning the Magnitude of the Sun, Moon, and Stars : And indeed so many, and so various are the Opinions both of the Antients and Moderns, of this Matter, that it is impossible to ground any probable Belief upon them : However, I will give some of their Opinions, but rather for Curiosity than Instruction. I. Heraclitus held the Sun to be a Foot broad :

Because that SPACE, thro' which the Rays can fly,
The HEAT can reach our TOUCH, the LIGHT our EYE:
Can

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broad: II. Anaxagoras, many times as big as the Countrey of Peloponnelus. III. Animaxander, as big as the Earth. IV. Empedocles, a vast Mass of Fire, even bigger than the Moon. V. Archelaus, the biggest of all the celestial Lights. VI. Plato, never to be conceiv'd, nor found out. VII. Cicero, immense. VIII. The Egyptians, and after them Macrobius, eight times as big as the Earth. IX. Others, whose Opinion Cicero, Tattius, and Philoponus mention, but conceal their Names, above eighteen times as big as the Earth. X. Eratosthenes, seven and twenty times as big as the Earth. XI. Cleomedes, near three hundred times as big as the Earth. XII. Aristarchus, above two hundred fifty four times as big as the Earth. XIII. Hipparchus, a thousand and fifty times as big as the Earth. XIV. Plutarch says, there were some who held the Sun to be a thousand seven hundred and twenty eight times as big as the Earth. XV. Possidonius, fifty nine Thousand three hundred and nineteen times as big as the Earth. What Certainty then can be grounded on so many different Opinions? And Archimedes own'd, it was next to impossible to take the Diameter of the Sun, because neither the Sight, nor the Hands, nor the Organs, by which the Observation is perceiv'd, are sufficient to demonstrate it exactly, and therefore no Credit ought to be given to them. This makes Lactantius say, *Dementiam esse disquirere, aut scire velle, Sol utrumne tantus, quantus videtur, an multis partibus major sit quam omnis hac terra*: That it is a

folly to inquire, or be desirous to know, whether the Sun be as big as he seems to be, or many Times bigger than the whole Earth. And the same Uncertainty there is likewise concerning the Magnitude of the Moon, and of the other Planets and Stars.

But the more modern, both Philosophers and Astronomers, tho' their Opinions be indeed various, as to the Magnitude of this Glorious Luminary, yet having grounded them on more probable Methods of Observation, have at least come nearer the Truth, than the Antients, and not left us so much in the Dark, nor in so great Uncertainty concerning it. It is most certain, that we form a right Judgment of the Magnitude of an Object, by the Distance of one Part of it from another, and by the Distance of the whole from us: For the Distance of it being first consider'd, we find that the Rays from all Parts of the Object cause an Impression on the Retina in the Extremities of more or less distant Fibres: Therefore the farther distant those Extremities, so impress'd, are from each other, the greater we judge the Object to be; and in like manner on the contrary: inso-much that it is first necessary to know the Distance of an Object, before we can attain to the true Knowledge of its Magnitude: And therefore whenever we are mistaken in the Distance, we must necessarily be deceived in the Magnitude likewise: And consequently, as often as we judge an Object to be farther from us than it really is, we imagine it to be bigger than it is; because the farther distant an Object is, the

Can lessen nothing, nor contract the Frame,
Nor make the FIRE appear a milder Flame :

Now

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the less will be the Space between the incident Points of the Rays, that make the Impression on the Retina : And on the contrary, as often as we judge the Object to be nearer us than indeed it is, we fancy it to be less than really it is, because the Space between the Points of the Rays, &c. is larger. Hence we see the Reason, why it is so difficult to come by the true Knowledge of the Sun's Magnitude : For the Distance of the Sun from the Equator is so hard to be discovered, that, if we may believe Pliny, to endeavour to find it out, *penè dementis otij est*, is an Employment fit for none but Madmen. Ricciolus likewise confes-

ses, that the Sublimity of the Sun has exceeded and baffled hitherto the Search and Investigation of all Astronomers. However he himself says, in *Almagest*. lib. 3. cap. 11. That the true Magnitude of the Sun may be known from its true Semidiameter ; for that, being doubled, gives its true Diameter, whence its other Species of Magnitude are derived, according to the Rule of Proportion. This Method has been observ'd by many of the most learned and judicious Astronomers, whose Opinions concerning the Sun's Magnitude, may be seen at one View in the following Table.

The true Magnitude of the SUN compar'd with the EARTH.

The SUN's contains	True Di- ameter.	Circum- ference.	Area of Convex its great- est Cir- cle.	Superfi- cies.	Solidity.
according to the fol- lowing Authours.	Simple Diam. of the Earth.	Simple Diam. of the Earth.	Square Diam. of the Earth.	Square Diam. of the Earth.	Solidity of the Earth.
Ptolomæus, Mau- rolycus, Clavius, and Barocius.	$5 \frac{2}{3}$	$17 \frac{2}{7}$	24 0	134 0	$166 \frac{3}{8}$
Aristar- } more than chus } less than	$6 \frac{1}{3}$ $7 \frac{1}{6}$	$20 \frac{1}{7}$ $22 \frac{3}{7}$	$30 \frac{2}{3}$ 38 0	127 0 155 0	$254 \frac{1}{17}$ $368 \frac{1}{11}$
Albategnius	$5 \frac{7}{10}$	$18 \frac{5}{7}$	26 0	108 0	186 0
Copernicus	$5 \frac{27}{60}$	$16 \frac{1}{2}$	22 0	91 0	$161 \frac{7}{11}$
Tycho and Blancanus	$5 \frac{14}{75}$	$16 \frac{2}{7}$	22 0	85 0	140 0
Longomontanus	$5 \frac{807}{10000}$	$18 \frac{1}{14}$	26 0	95 0	196 0
Keplerus	15 0	$47 \frac{1}{18}$	176 0	706 0	3375 0
Lansbergius	$7 \frac{17}{20}$	24 0	46 0	176 0	434 0
Bulialdus	7 0	$22 \frac{2}{7}$	39 0	156 0	343 0
Wendelinus	64 0	$200 \frac{96}{1000}$	3216 0	12864 0	262144 0
Kircherus	5	16 0	21 0	83 0	140 0
Rheita	10 0	$31 \frac{1}{10}$	78 0	314 0	1000 0
Ricciolus	$33 \frac{5}{6}$	$106 \frac{15}{1000}$	885 0	30056 0	38600 0

Of the SUN.



HIS glorious Luminary is in Hebrew call'd Chamah, or Schemash, from his Heat, or Adon Schemez, i. e. Dominus Sol: By the Phœnicians, Baal Schemaim, i. e. Dominus Cœli: in Chaldee, Schemso; in Arabick, El Schemo: By the Greeks, Ἥλιος and φοῖβος, quasi φῶς τῆ βίης, i. e. Lux vitæ, whence the Latine, Phœbus, call'd likewise Titan, Apollo, Cor Cœli, Oculus Jovis, and Ὀμμα Ἀιθέρος, i. e. oculus ætheris. The Egyptians call'd the Sun, Potiris, which in their Language signifies, the Holy God; and Osyris, from his vital and kindly Heat: as, on the contrary, Typhon and Seth, from his violent and destructive Fervour: and by them call'd likewise Horus: By the Persians Mithra; i. e. Dominus or Dyneſta: by the antient Arabs, Urotalt, i. e. Lucis Deus; and Dufares, or Dai-Uſar, i. e. Deus perlustrans, as Sebedius de Dijs German. interprets thoſe Names. By the Syrians, according to Macrobius, the Sun was call'd Adad, or, as Scaliger and Selden would rather have it, Ahad, or Elhad, i. e. unus: or as Pontanus in his Notes on Macrobius, Badad, i. e. Solus, unicus. Heraclitus, as Macrobius in Somn. Scip. lib. 1. cap. 20. calls the Sun the Fountain of all celestial Light and Heat: Moſt of the Antients, as Democritus, Metrodorus, Pythagoras, Plato, &c. and of the Moderns likewise, as Kepler, Scheinerus, Rheitæ, Bulialdus, Kircher, Ricciolus, &c. imagine the Sun to be a real fiery Body, conſiſting of true proper Elementary Fire, partly liquid, partly ſolid: The liquid is as it were an Ocean of Light, and moves with flaming Billows, and fiery Ebullitions: This is manifeſt to thoſe who regard that moſt glorious Luminary, by the help of a Teſcope: The ſolid Parts are, like the Land in our Terraqueous Globe, divided into Continents, Iſlands, Mountains and Rocks, as if it were to reſtrain the vehement Motion of the exeſtuating ſolar Ocean, and by the frequent Alliſions to repel, diſſipate and break the impetuous Force of it; to the end it may with greater

greater Efficacy impart its all-productive Virtue to the Bodies on which it bestows Light and Influence.

It is likewise probable, that within the solar Globe, as in this Earth of ours, there are vast Caverns and Receptacles of Fire, that break out of the Suns ignivomous Mountains, in like manner as subterranean Fires are ejected out of the Mountains *Ætna*, *Hecla*, and *Vesuvius*: Besides, the solid Parts of the Sun, within whose Bowels is contain'd the fluid and liquid Fire, like Metal in a Furnace, are thoroughly ignify'd, in the same manner as the Bricks of the Roofs and Sides of Furnaces are made red hot, and look of the same Colour as the fiery Mass of melted Matter within them.

It is farther suppos'd, that the solid Parts of the Sun consist of a Matter abestinous and incombustible, and far better able to resist the Voracity of Fire than this Earth of ours: Nay, supposing that some Parts of the Sun here and there should be consum'd, and whole Mountains be level'd and wasted, yet there is no necessity from thence, that the Globe of the Sun should be totally destroy'd, no more than is this Earth by the frequent Accidents of such Kinds of Ruins and Decays. Moreover, the Splendour, as well of the fluid, as solid Fire of the solar Globe, is evidently far more bright than our Fire or Flame here below: the End for which it was made necessarily requiring it should be so: Since it may reasonably be conjectur'd, to be created for the Fountain of Light, if not of the whole World, at least of the Planetary System.

It is likewise observ'd; that as well this liquid Sea of Fire, as that which breaks out of the Caverns and Mountains, constantly exhales fuliginous Vapours, not black and sooty, like the Smoke of our Fire, but bright and clear; and that these Exhalations, condensing in the ambient *Æther*, do in a manner overcast the Sun, as Clouds overshadow the Earth. From all which, and from the Evidence of frequent Observations, lately made by the Help of the Telescope, is manifest the Mistake of Aristotle and his Followers; who imagine the Sun to be an unalterable Substance, whereas indeed he is subject to divers Changes and Alterations: which not only the Generation and Production, but the Dissolution and Corruption likewise of several Phænomenons in the Body of the Sun, altogether unknown to the Antients, clearly demonstrate:

monstrate : Among which the most remarkable are those, which late Astronomers call the *Maculæ solares*, and the *Faculæ solares*.

The *Maculæ*, or Spots are, they tell us, certain cloudy obscurities appearing upon the Disk of the Sun ; and suppos'd by some to be a fuliginous obscure Matter or Exhalation, sometimes closely compacted into one, sometimes dispers'd and dissipated into several Parcels, and issuing from its fervent fiery Body, by Force of its extream Heat : But whether they are in the Sun itself, or some Space distant from it, is not certain : However, it is from several Observations most probable, that they are in the very Body of the Sun, or at least not far from the Surface of it : They are very irregular in their Shapes and Figures, as well in regard to their Form as Size ; and some of them are more durable than others : And those that have the longest Duration, are held to be the solid Parts of the Sun, and it is believ'd that the reason why they discover themselves in various Figures, and of different Magnitudes, is because of the vertiginous Motion of the Sun about his own Axle, representing them to our Sight in divers Situations.

The *Faculæ solares* are held to be partly massy Globes of Fire, that burst out of the ignivomous solar Mountains ; and which, by reason of their Brightness, shine amidst the *Maculæ*, or fuliginous cloudy Vapours, and sometimes disappear in a short space of time, sometimes continue long visible : and partly Effervencies of the exestuating solar Ocean ; which, by reason of the excessive innate Fervour of the Globe of the Sun, boils up into mighty Waves, like so many Mountains of Light, that scatter and disperse the darker *Maculæ*, and discover, as it were a fiery Ocean, fluctuating and agitated with flaming Billows of excessive Splendour : But Scheinerus in disquisit. Mathem. defines them thus : *Faculæ sunt areolæ in sole lucidiores reliquo ejusdem corpore : i. e.* The *Faculæ* are certain small Plats, or Quarters in the Sun, brighter than the rest of his Body. Galilæo in Letter. 3. delle *Macchie Solari*, describes them as follows ; In the Face of the Sun, says he, there appear certain Marks, brighter than the rest, and which observe the same Motion as the *Maculæ* : Nor can it be doubted but that they are inherent in the very Body of the Sun ; because it is not credible, that there
can

can be any Substance more refulgent than that of the Sun itself.

Lastly, This Observation of the Sun's Spots and Lights has given Occasion to Astronomers to remark, that the Sun, besides his Motion of Revolution, diurnal and annual, according to the Hypothesis of the Immobility of the Earth, has likewise a Motion from East to West about his own Axle: which Conversion is finish'd, according to some, in the space of twenty seven Days, or thereabouts: According to Kepler and others, in twenty four Hours: but others assign it a much more wonderful Celerity, particularly Otto de Guericke, who affirms the vertiginous Course of the Sun to be compleated in a moments Space. All which consider'd, together with what we said before of the Sun's Magnitude, we may well say with Lucretius;

Nam licet hinc mundi patefactum totius unum
Largifluum fontem scatere, atque erumpere flumen
Ex omni mundo, quô sic elementa vaporis
Undique conveniunt, & sic congestus eorum
Confluit, ex uno capite hic ut profluat ardor.

And conclude with the same Poet, That it is no wonder the Sun dispenses so much Light and Heat to the Earth.

As to the Figure of the Sun, Epicurus affirm'd nothing for certain concerning that neither, but only said, that the various Opinions of several Men, of the different Figure of the Sun, might for any thing he knew to the contrary, be all of them true. Mean while 'tis certain that the Opinions differ'd concerning the Figure of the Sun likewise: For I. the Pythagoreans, Platonicks, Peripateticks and Stoicks held the Sun to be globous. II. Anaximenes believ'd it to be flat, and broad like a Leaf, or Plate of Iron, or other Metal. III. Others to be in Shape like a Dish or Platter. IV. Heraclitus would have the Sun crooked, and bending like the Keel of a Boat: They gave likewise the same different Figures to the Moon and Stars. The Figure of the Sun is now universally held to be globous.

615 Now since the vig'rous RAYS do freely flow
 As far as us, and visit all below ;
 Their FIRES, and FIGURES are the same they show :
 Nor greater all, nor less. —————

————— And thus the MOON,
 Whether with BORROW'D RAYS, or with her own,
 620 She view the World, carries no larger SIZE,
 No fiercer FLAMES, than those that strike our Eyes.
 For OBJECTS, far remov'd, at Distance seen,
 When too much hind'ring AIR is plac'd between,
 No certain FIGURE show : no EYE can trace
 625 Each Line, each Figure of the distant Face :

But

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619. Borrow'd Rays] For as the Sun has, but only a mutual Light, and borrow'd from the Sun ; which her being plac'd beneath the Sun, evidently evinces : His Words are these, *Lunam, quæ luce propriâ caret, & de sole mutuatur, necesse est fontis luminis sui esse subjectam : Hæc enim ratio facit lunam non habere lumen proprium, cæteras omnes stellas lucere suo, quod illæ supra solem locatæ, in ipso purissimo æthere sunt, in quo omne, quicquid est, lux naturalis & sua est. — Luna vero, quia sola ipsa sub sole est, & caducorum jam regioni luce suâ carenti proxima, lucem nisi de superposito sole, cui resplendet, habere non potuit. — Luna speculi instar, lumen, quo illustratur emittit ; & fit acceptæ luci penetrabilis adeo, ut eam de se rursus emittat, nullum tamen ad nos perferentem sensum caloris, quia lucis radius, cum ad nos de origine suâ, id est, de sole pervenit, naturam secum ignis, de quo nascitur, devehit ; cum vero in lunæ corpus infunditur, & inde resplendet, solam refundit claritudinem, non calorem ; nam & speculum, cum splendorem de se vi oppositi emittit, ignis solam ignis similitudinem carentem sensu caloris*

But since the MOON presents a certain SIZE,
A certain SHAPE, and FIGURE, to our Eyes,
'Tis plain, that it appears as great as 'tis.

But farther on: Since all our FLAMES below,
630 At Distance seen, do various Sizes show;
Now lower sink, now raise their lofty Head,
And now contracted seem, now farther spread:
We may conclude the STARS, when seen from far,
Or somewhat greater than their FIGURES are,
635 Or somewhat, tho' but little less, appear.

But more: no Wonder that such vast Supplies,
Such STREAMS of RAYS from this small SUN should
As cherish all with Heat, and fill the Skies. (rise,
For we may fancy this the SPRING OF FIRE,
640 To which the VAPOURS of the WORLD retire;
There gather into STREAMS, and thence they fall.
As from the FOUNTAINS Head, and spread o'er all:

Thus

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loris ostendit, &c. In Somn. Scip. lib. 1. cap. 19. and Cicero, lib. 2. de Naturâ Deor. is of the same Opinion. And Festus, in voce Mulus, observes, that the Moon is said to be drawn by Mules, in Regard to her borrow'd Light; because, as Mules are not generated out of their own Kind, but of a Horse; so the Moon is said to shine, not with her own, but notho lumine, as Lucretius in this Place, and after him Catullus expresses it, with a Bastard Light, which she derives from the Sun. And Milton, speaking of the Sun, calls him

Great Palace of all
Light!
To him, as to their Fountain,
other Stars
Repairing, in their golden Urns
draw Light;
And hence the Morning-Planet
gilds her Horns.

Less bright the Moon,
His Mirrour: with full Face
borrowing her Light
From him, &c.

629. But farther, &c.] In these 7. v. he speaks of the Mag-

nitude of the other Stars and Planets: of which we have already spoken at large, v. 551.

636. But more, &c.] But it seems almost impossible, that so much Heat and Light, as are diffus'd thro' the whole Sky, immense as it is, should flow from so small a Body as the Sun, if it be no bigger than it appears to be. To satisfy this Difficulty, Lucretius teaches, in 9. v. that we may imagine the Sun to be as the perpetual Source of Light and Heat: because the Seeds of Light and Heat continually flow from all Parts of the Universe into the Body of the Sun, as into a great Fountain: so that we feel and perceive the Heat and Light, not of the Sun only, but of the whole World: To which he adds, in 10. v. that perhaps the Air, near the Sun, is set a-fire by his Beams: and that many fiery Particles, invisible to us, are hovering about his Orb; and thence may proceed so great a Profusion of Light and Heat. Thus Lucretius, in a Thing so doubtful, dares pronounce nothing for certain.

652. Dark

Thus have we seen a little FOUNTAIN yield
Vast spreading Streams, and flow o'er all the Field.

645 Or else the SUN might kindle neighb'ring AIR,
And raise surprizing Heat and Fervour there :
Perchance the AIR is of convenient Frame,
And may be kindled by a little Flame :

As oft in STRAW and CORN fierce Flames prevail,
650 From one poor falling Spark, and spread o'er all :

Or else the SUN has secret stores of Heat,
Dark, and unshining Stores, but vastly great :
And these increase the Warmth, these move the Sense,
And these, united, make the Heat intense.

655 How tow'rd's both POLES the SUNS fixt Journey bends,
And how the YEAR his crooked Walk attends,

Why

NOTES.

652. Dark Stores of Heat] The Original has, *cæcis fervoribus*, that is to say, invifible to us: For, as Passeratius notes, *cæcus* fignifies not only what does not fee, but alfo whatever is not feen. *Cæcum non tantum quod non videt, fed etiam quicquid non videtur.* In Propert. lib. 2. Eleg. 27.

655. How towards, &c.] In Order to explain the annual Courfe of the Sun, and the monthly Courfe of the Moon, through the twelve Signs of the Zodiack, he firft propofes, in 25. v. the Opinion of Democritus, who taught, that the lower Spheres are roul'd and whirl'd around by the higheft Orb, call'd the Primum Mobile, either fwifter or more flow, according to the Distance of each Sphere from that higheft Orb: Thus the Sun moves fwifter than the Moon; becaufe the Sun is higher, and therefore the Signs more feldom overtake, and pafs by him, than they do by her: Nor is it then ftrange, that the Moon runs thro' all the Signs in one Month, which the Sun goes thro' but in twelve.

The two firft of thefe Verfes

are tranfcrib'd, Word for Word, from Cowley, David. i. p. 19. of the Folio Edition. The Original runs thus:

*Nec ratio folis simplex, nec certa patescit,
Quo pacto æstivis è partibus Ægocerotis,
Brumales adeat flexus, atque inde revertens
Canceris ad metas vertit se ad solstitiales.*

Which our Translatour has render'd in the two Verfes, that follow thefe of Cowley.

Both Poles] The South and North Pole, which are two Points about which the Heavens are roul'd: fo call'd from *πολῆω*, I turn, whence the Latines call'd them vertices. The North Pole is always vifible to us, and to the French, Italians, &c. The South is never feen by us, but by thofe whom we call Antipodes. See above v. 545.

656. His crooked Walk] Cowley calls the Walk of the Sun crooked, by Reason of the Obliquity of the Zodiack, thro' which he makes his annual Revolution. See the Note on v. 661.

Why from the SUMMERS Height he soon declines,
And falls to visit the cold WINTER SIGNS,

And

NOTES.

658. The cold Winter Signs] The Signs, in matter of Astrology, are Asterisms, or Configurations of fix'd Stars: which are imaginary Forms, devis'd by Astrologers, the better to comprehend and distinguish those Stars from one another: Thus one Asterism is call'd the Bear, another the Dragon, &c. to the Number of forty eight in all, according to the antient Astrologers; besides a few lately invented by the Discoverers of the South Pole. It is not agreed who first reduc'd the Stars into Asterisms, or Constellations: nor is it an easy Task to reconcile the different Morphoses or Figures in the several Spheres of the Chaldeans, Persians, Egyptians, Greeks, Arabians, Indians, Chineses and Tartars: of whose Opinions in this Matter, the various Difference may be seen in the Description of Abu Mather, commonly call'd Albumazar, in Aben Ezra de Decanis Signorum, publish'd by Scaliger, in his Notes on Manilius: Of all which Salmasius, in Præfat. ad Diatrib. de Antiq. Astrolog. believes those of the Greeks, which are most commonly us'd amongst us, to be of latest Date: As to the Names of the Stars, it is scarce doubted, but that Adam first impos'd them; tho all those Appellations, except some few preserv'd in Scripture. are since utterly lost: Yet most of the Names we now use, are above two Thousand Years standing, as appears by Hesiod and Homer. They were not however all nam'd at one and the same Time: for some are of late Denomination, particularly that which Conon, Antinous, and others call

Coma Berenices. Some report Astræus to be the first who gave names to the Stars: whom for that Reason

Fama Parentem
Tradidit Astrorum

As Aratus says in Germanicus: and others ascribe it to Mercury: To give the several Names of the Signs and Constellations, would engage me in too tedious a Task: I will therefore confine my self to the two Lucretius here mentions, which are Ægoceros and Cancer.

Ægoceros, by the Greeks, call'd *Αἰγόκερος*, from *αἶζ*, a Goat, and *κέρας*, a Horn, and *Αἰγίπαιον* by the Latines, Capricornus; Hircus Æquoris by Asclepiadius and Vomanus, Pelagi Procella by Vitalis: and thus Horace,

Tyrannus
Hesperiae Capricornus undæ.

The Poets fabled, that Ægoceros was born of the Goat of Amalthea, and plac'd by Jupiter among the Stars, in Memory of that God's having been nourish'd with the same Milk. Some say, that this was made a Constellation in Honour of Ægipan, the Son of Jupiter by the Olenian Goat; but others, with more reason, that Ægipan was Foster-Brother to Jupiter, and Son of Æga, the Wife of Pan, from whence he had his Name. And Bassus in Germanic. from the Authority of Epimenides, writes, that Ægipan assisted Jupiter in his Wars against the Titans, and help'd him to put on his Armour; for which reason he was honour'd with this Celestial

And then returns. And why the nimble Moon
 660 Does drive her Chariot faster than the Sun;
 And in one Month thro' all the ZODIACK go,
 While the grave SUN's a year in walking thro':

For

N O T E S.

Celestial Dignity : He was represented half-Goat, half-Fish, the reason of which, says the Scholiast on Aratus, was, because having found on the Sea-shore, the Shell of a Murex or Purple-Fish, he wound it as if it had been a Horn, and so struck a Panick Fear into the Titans, whence he came to be figur'd with a Tail like a Sea-monster. The Sun entering into this Sign, makes the Winter Solstice. Cancer, by the Greeks call'd *Καρκίνος*, a Crab is said to have been kill'd by Hercules for biting him by the Foot, when he encounter'd the Serpent Hydra, and to have been made a Constellation at the Intreaty of Juno. This Sign is in that Part of the Heaven, which the Sun reaches about the middle of June, and then makes our greatest Heats, longest Days and Summer-Solstice : Moreover, these two Signs, Cancer and Capricornus, are celebrated by the Chaldaick, Pythagorean and Platonick Philosophers, the first of them for being the Gate by which Souls descend into humane Bodies ; the last for being that by which they re-ascend into Heaven, whence they call Cancer, *Porta hominum*, and Capricornus, *Porta deorum*. Macrobius in *Somn. Scip. lib. 1. cap. 12.* says, that the natural Philosophers call'd these two Signs, *Portas Solis*, the Gates of the Sun ; and then having the reason of it, he adds : *Per has portas animæ de cœlo in terras meare, & de terris in cœlum remeare creduntur : ideo hominum una, altera Deorum vocatur : hominum Cancer, quia per hunc in inferiora descensus est :*

Capricornus Deorum, quia per illum animæ in propriæ immortalitatis sedem, & in Deorum numerum revertuntur. See likewise, Cœl. Rhodig. Antiq. Lect. lib. 15. cap. 23. and Kircher in OEdip. Ægypt. Tom. 2. p. 535.

660. Her Chariot, &c.] Homer and Ovid make the Moon to be drawn in a Chariot by two Horses, one black, the other white ; of which Bassus in Germanic. gives this reason, because, says he, she sometimes is seen by Day, as well as in the Night. Others will have her to be drawn by Oxen : and therefore Nonnus in *Dionys. lib. 12.* calls her,

—Βοῶν ἐλάττωσε Σελήνη.

Of both which we have express Representations in the Roman Coins ; and particularly in those of the Empress Julia Domna. See Trifan. in his *Commentar. Tom. 2. pag. 129.* She is likewise said to be drawn by Mules, of which we have spoken above, v. 619. Claudian *lib. 3. de laudibus Stiliconis*, makes her to be drawn by Stags in regard of the swiftness of her Motion : and so too she is represented in several Consular and Imperial Coins, that may be seen in Ursinus, Golzius, and Gorlæus.

661. 662. Zodiack] The Zodiack is called by Prolomy *Κύκλος τῶν Ζωδίων*, the Circle of Animals, because it is divided into twelve Signs, all of which resemble, either Men or some other living Creatures, that are describ'd and mark'd in the Zodiack at equal Distances from one another. By the Latines it is call'd *Signifer*, and by the Greeks

Σιμεοφόρος.

Σημεοφόρος. It is describ'd to be a Circle, or rather a Zone, obliquely passing from East to West, by the Equinoctial and Solstitial Points, and parted in the midst by the Ecliptick, which divides it into two Parts, the one Northern, the other Southern, both which are terminated by the Circumferences of two imaginary Circles, less than one of the great Circles, and is far distant from the Ecliptick, as is the greatest Latitude of any Planet from thence. The Invention of this Circle is by some ascrib'd to Pythagoras, by others to OE-nepides the Chian, and by others to Anaximander the Mileſian. See Plutarch. de Placit. Philosoph. and Pliny, lib. 2. cap. 8. Manilius, lib. 1. v. 675. speaking of the Zodiack, says,

Nec visus aciemque fugit, tantumque notari
Mente potest, sicut cernuntur
mente priores ;
Sed nitet ingenti stellatus bal-
theus orbe,
Insignemque facit cælato lumine
mundum.

which Creech renders as follows :

It is not hid, nor is it hard to
find,
Like others, open only to the
Mind :
For like a Belt, with Studs of
Stars, the Skies
It girds, and graces ; and invites
the Eyes.

And Scaliger, in his Note on that Passage, farther observes, that it has this in common with the Galaxy or Milky Way, that both of them are not, like all the other Circles of the Sphere, λογω
δεορνήτοι, perceivable only to Reason, but that they are both of them visible to the Sight likewise, which none of the others are. Yet Manilius seems to speak

poetically, making the Zodiack a visible Circle, because the twelve Signs moving in it are visible ; but properly speaking, as it is taken for a Fascia or Zone only, it is no otherwise perceptible than by reason : and therefore Geminus in Isagog, rightly says, That of all the Circles in the Heavens, only the Via Lactea is perceivable by Sense, the others being no otherwise discernible than by the Eye of Reason. Moreover concerning the Zodiack, there are these five things that chiefly deserve to be known. I. It is divided into 360 Parts or Degrees : each Sign into 30 Degrees ; one of which Degrees, or thereabouts, the Sun makes or compleats every day, by his primary or own proper Motion, proceeding or going forward from the West to East ; and thus in about the space of a year he runs through the twelve Signs ; mean while by his secondary or common Motion, which the Latins calls Raptus, a Whirl, proceeding from East to West, he makes the Compass of the whole Earth in the space of four and twenty hours. II. The Order and Names of the Signs are contain'd in these verses :

Sunt Aries, Taurus, Gemini,
Cancer, Leo, Virgo,
Libraque, Scorpius, Arcitenens,
Caper, Amphora, Pisces.

Which being most of them Animals, the Circle was from thence call'd Zodiack, from the Greek Word ζώδιον, which signifies an Animal, as we hinted before. III. Aries answers to the Month of March, about the tenth of which Month the Sun is said to enter into that Sign, and to run thro' all of it by about the tenth of April, at which Time he enters into Taurus : and in like manner of all the rest. IV. It is call'd oblique, because it is not at an equal distance from each Pole :
but

For this a thousand Reasons may be shown;
But yet 'tis hard, nor safe, to fix on one.

- 665 For first, *DEMOCRITUS* has found the Cause
Perhaps, and rightly settled Natures Laws;
For thus he says: Great ORBS are whirl'd above,
And by that Whirl the lower CIRCLES move;
And so the distant ORBS, that lie below,
670 Far from this Spring of Motion, move but slow,
Because the Pow'r still lessens. Thus the SUN
Is far outstript by nimble STARS, that run
In higher Rounds: much more the lower MOON.
Now since she's plac'd so low, since weak the Force,
675 She can not have an equal nimble Course
With STARS; so these may overtake the MOON,
And pass beyond her oft'ner, than the SUN:
Thus she may seem to move, her walk appear
Thro' all the SIGNS, 'cause they return to her.

Besides;

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but being carry'd cross the Torrid Zone, it reaches both the Tropicks, and twice divides the Circle of the Æquator. In the first Degree of Cancer it touches the North Tropick, which is thence call'd the Tropick of Cancer: It touches the South Tropick in the first Degree of Capricorn, whence that Tropick has the Name of the Tropick of Capricorn. It cuts the Æquator in the first Degree of Aries, and in the first Degree of Libra. V. When the Sun comes to the Tropick of Cancer, about the tenth of June, then is our Height of Summer, or Summer-Solstice: when about the tenth of December, he reaches the Tropick of Capricorn, then is our Depth of Winter, or the Winter-Solstice. These Tropicks have their name from *τρεπω*, I turn, because when the Sun has reach'd to either of them, he turns his Course back again towards the other. Moreover, when the Sun

reaches to the Section of Aries, which he does about the tenth of March, then is the Vernal Equinox; when he comes to the Section of Libra, about the twelfth of September, then is the Autumnal Equinox.

662. While the, &c.] To the same purpose Cowley:

— The self same Sun
At once does flow and swiftly run:
Swiftly his daily Journey goes,
But treads his annual with a statelier Pace;
And does three hundred Rounds inclose
Within one yearly Circles Space,
At once with double Course in the same Sphere,
He runs the Day, and walks the Year.

665. Democritus, &c.] Of him See B. 3. v. 356. and v. 1044. and B. 4. v. 335.

680. Besides,

680 Besides; by Turns a constant STREAM of AIR,
 At fixt and certain Seasons of the Year,
 Might rush from either Part, and make the SUN decline,
 And fall from SUMMER to the WINTER Sign :
 Or drive it up again, and bring the Rays
 685 And Heat to us, and shew us longer Days.
 And thus the MOON, thus other STARS may rise,
 And sink again into the WINTER SKIES,
 Driv'n by these two constant Streams of Air. —
 For CLOUDS in STORMS two diff'rent ways do move,
 690 The lower opposite to those above :
 What wonder then the SUN with vig'rous Beams,
 And STARS are driven by two constant Streams ?
 And DAY may end, and tumble down the WEST,
 And sleepy NIGHT fly slowly up the EAST ;

Because

NOTES.

680. Besides, &c.] In these 13. v. he introduces two several Airs, waiting on the Sun and Moon : by one of which they are shov'd down from Cancer to Capricorn ; and by the other heav'd up again from Capricorn to Cancer, and this at fixt and certain Times : And that it may not seem incredible, he bids us look on the different Racks of Clouds, which several Winds drive several Ways.

Besides these and the foregoing Opinion, there was a third, which Cicero, lib. 3. de Nat. Deor. ascribes to Cleanthes, who, as if the Sun follow'd his Food, would have the Humidity that arises from the Earth, and from the Sea to be the Cause of the Summer and Winter Solstices. For the Words of Cicero are these. Quid enim? Non eisdem vobis placet omnem ignem pastu indigere, nec permanere ullo modo posse nisi alatur? Alii autem Solem, Lunam, & reliqua Astra, aquis alia dulcibus, alia marinis? eamque causam Cleanthes assert, cur se Sol referat, nec longius progrediatur solstitiali orbe, itemq; brumali, nè longius discedat à cibo? For are not you of Opinion that all Fire requires Food, and can

in no wise subsist, unless it be nourish'd? Nay, that the Sun, the Moon, and other Stars are fed, some with fresh, others with Sea Water? And does not Cleanthes alledge, that the Cause of the Suns returning from the Summer and Winter Solstice, and his going no farther is, that he may not straggle too far away from his Meat?

686. And thus, &c.] This and the following Verse run thus in the Original;

Et ratione pari lunam stellasque
 putandum 'st,
 Quæ volvunt magnos in magnis
 orbibus annos,
 Aëribus posse alternis à partibus
 ire.

Where we may observe, that our Interpreter has totally omitted the second of those Verses, in which the Poet seems to allude to the Periods of the Stars, and the Revolutions of Saturn, Jupiter, and Mars.

689. For Clouds, &c.] This many nevertheless deny, tho' it be certain, says Faber, that there is scarce any Tempest of Thunder and Lightning, but this happens.

693. And Day, &c.] In these

695 Because the SUN, having now perform'd his Round,
And reach'd with weary Flames the utmost Bound
Of finite Heav'n, he there puts out the RAY,
Weary'd and blunted all the tedious Day
By hind'ring AIR, and thus the FLAMES decay.

700 Or else that constant Force might make it move
Below the Earth, which whirl'd it round above:

And so the constant MORNING still may rise,
And with pale Fires look thro' the lower Skies ;

Because

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9. v. he tells us, that Night succeeds the Day, either because the Sun, being fatigu'd with the length of his Journey, [for the setting Sun seems faint and weary] is extinguish'd: Or else because he is whirl'd with the same force beneath the Earth by Night, as above the Earth by Day. Epicurus in the Epistle to Pythocles contends, that the Rising and Setting of the Sun may be made, κατ' ἐμφάνειαν τὸ ὑπὸ γῆς, ἢ πάλιν ἐπικρύψιν, or, κατ' ἀνάψιν, τὸ κατὰ σβέσιν.

702. And so, &c.] In these 23. v. he teaches, That the Splendour, which we call the Morning, and which before the rising of the Sun adorns the Heavens, is occasion'd, because the Sun, returning from West to East, pours forth his Rays before he appears himself: or else it happens, because the Seeds of Fire, that were dispers'd abroad in his Journey the Day before, flow together in the Eastern Sky, and illustrate the Earth with a fainty and glimmering Light, before they have form'd and kindled up anew the Globe of the Sun: And if this Constancy of the Seeds flowing together to one Place seem incredible, let it be consider'd, that no less a Constancy may be observ'd in several other Things. Thus Plants shoot forth their Buds at a fixt and certain Season

of the Year: Thus Children breed their Teeth at a certain Age, &c.

This last Opinion, ridiculous as it is, was nevertheless embrac'd by Epicurus and his Followers: who as Cleomedes, lib. 2. c. 1. witnesses, held that a new Sun arose daily, and was daily extinguish'd; and Servius, upon the first Georgick, says, they did not pretend, that the Sun continu'd his Course thro' the other Hemisphere: but that the Orb of a new Sun was always made in the East; or, at least, that the old Sun was repair'd and lighted up anew. For Epicurus did not so much hold the quotidian Creation of a new Sun, as the daily Renovation of the old: To which Opinion Horace, in Carmine Sæculari, seems to allude,

Alme Sol, curru nitido diem
qui
Promis & celas, aliusque &
idem
Nasceris. —————

And Gassendus explains this Opinion of Epicurus in these Words: Since the Ocean compasses the Earth, the Sun may be extinguish'd by its Waters in the West, and return all along thro' the Waves by the North into the East, and rise from thence rekindled. Thus Gassendus; by

Because the SUN rolls round with constant Ray,
 705 And, rising upwards, shews approaching Day :
 Or else because the FIRES, dissolv'd at Night,
 There join again, and scatter vig'rous LIGHT.
 Thus when the Morning SUN begins to rise,
 Its Flames lie scatter'd o'er the EASTERN Skies,

Then

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which nevertheless he but little mends the Matter. Epicurus however was not the Authour of this ridiculous Opinion: For Xenophanes the Colophonian held, that the Moon and Stars were certain Clouds set on Fire, and that they were extinguish'd every Day, and rekindled at Night: and that, on the contrary, the Sun was extinguish'd every Night, and rekindled every Morning; or, to express it in the Words of Minutius Fœlix, *Congregatis ignium seminibus soles alios atque alios semper splendere.* Of the same Opinion likewise was Heraclitus, whose saying was, *ἡελίου νέεσθαι ἐφ' ἡμέρας* whence the Proverb in Plato, *Heracliteo sole citius extinguui.* And from them Epicurus receiv'd by Succession, *Hæreditatem stultitiæ*, as Lactantius calls it, this Inheritance of Folly. And yet Pomponius Mela, *de situ Orbis*, lib. 5. cap. 6. relates, that the Rising Sun, when beheld from Mount Ida, looks different from what it does, when regarded from any other Place in the whole Earth: For says he, soon after Midnight, many small Bodies of Fire are seen dispers'd and scatter'd in the East: and as the Day comes on, they are seen to join by Degrees closer and closer together, till being collected into fewer Bodies, all of them, from the first to the last, are kindled into Flames; and these Flames, joining into one, contract themselves into a

round Figure, and come to be a vast Globe of Fire, that seems annexed to the Earth; then it decreases by degrees, but still continuing its globous Form; and the more it lessens, it grows the more bright and fulgid: at length it disperses the shades of Night, and, being made a Sun, rises with the Day. *Orientem solem Idæus aliter quam in alijs terris solet, aspicit. Ostentantur namque ex summo vertice ejus spectantibus penè à mediâ nocte sparsi ignes passim micare, & ut lux appropinquat, ita coire & se conjungere videntur, donec magis, magisque collecti, pauciores deinde, ex unâ ad postremam flammâ ardeant: & cum diei clara lux, & incendio similis affulsit, cogit se, ac rotundat, & fit ingens globus: diu is quoque grandis, & terris annexus apparet: deinde paulatim decrescens; & quantum decrescit, eo clarior; fugat novissimè noctem, & cum die, jam sol factus, attollitur.* Pompon. Mela lib. 5. *de situ orbis*, cap. 6. This too is confirm'd by Diodorus Siculus, whose Account of this Matter we will give below, v. 711.

708. The Morning, &c.] Lucret.

Roseam Matuta per oras
 Ætheris auroram desert, & lumina pandit.

Matuta, as Cicero tells us, was the Goddess Ino, whom the Greeks call'd Leucothea, and the

- 710 Then gather to a Ball : And this we view
 From *IDA's* Top : this Fame reports as true.
 Nor is it strange that common SEEDS of FARE
 Should to the EASTERN Quarter still retire,
 Still ev'ry Day return, and make a SUN ;
 715 Because a thousand other Things are done
 At set, and constant Times, and then alone.
 Thus TREES, at certain Times, thus SHRUBS do shoot
 At certain Times, and bud, and bear their Fruit :
 Thus TEETH in Boys begin, and thus they fall ;
 720 Thus BEARDS in YOUTH ; at certain Seasons all :
 Thus THUNDER, SNOW, and STORMS, and WINDS appear
 At fixt and certain Seasons of the Year :
 As Things first happen'd, they continue on ;
 The Course, that CHANCE first gave them, still they run.
 The

N O T E S.

the Latines, *Matuta* ; the Daughter of *Caducus*. *Ino dea dicitur, quæ Leucothea à Græcis, à nobis Matuta dicitur ; cum sit Caduci filia. De Nat. Deor. Lib. 3.* And Milton,

To resalute the World with sacred Light
Leucothea wak'd, and with fresh
 Dews embalm'd
 The Earth : and now the smiling
 Morn begins
 Her rosy Progress. —

711. *Ida's Top* :] There are two Mountains of this Name : one in *Crete*, the other in *Phrygia*, which last in one Chain of Mountains runs thro' the whole Countrey of *Troas* : The Northern Part of it reaches to the Shore of the *Propontick* ; the West to the *Hellespont*, the South to the Gulph of *Adramytteum* in the *Ægean Sea*, and the East looks over the Place where stood the City of *Troy* : and in this part of it *Paris* gave his Judgment of the three Goddesses. This was the highest Part of all the Mountain, and that of which *Lucretius* speaks : *Strabo* calls

the Top of it *Gargarus*. Of the Sun-rising, beheld from this Mountain, *Diodorus Siculus*, lib. 17. p. 491. gives the following Account.

Ἰδίων δέ τι τὲ ὠρέδοξον συμβαίνει γίνεσθαι ἐν τῷτο τὸ ὄρε, καὶ τὴν τὴν Κυνὸς ἐπιτολὴν ἐπ' ἀκρας τῆς κορυφῆς ἀπὸ τῆς νιλικίας ἀντὶ τοῦ ἁέρος ὑπερπερὶ γίνεσθαι τὴν ἀκρὰν τῶν ἀνέμων πνοῆς ὁρᾶσθαι ὅτι ἡλίου ἐστὶ καὶ νυχθὸς ἔσης ἀναλέμοντα τὰς ἀκτῖνας ἐκ ἐν κυκλοτερῇ χήματι τετραμμένον, ἀλλὰ τὴν φλόγα καὶ πρὸς τὰς τόπας ἔχοντα διεσπαρμένω, ὥστε δοκεῖν πυρὰ πλείω διαφανεῖν τῇ γῆς ὁρίζοντι. Μετ' ὀλίγον ὅταν ἀναγένηται τὰ πάντα πρὸς ἐν μέγεθος, ἕως ἀνγένηται τριπλεθρον διάστημα, καὶ τότε τῇ ἡμέρᾳ ἐπιλαβέσθαι, τὸ φαινόμενον τῇ ἡλίᾳ μέγεθος πληρωθὲν τὴν τῇ ἡμέρᾳ ἀφ' ἧς καὶ λαοσκευάζει. Which is as much as to say : A singular and wonderful Thing, happens in this Mountain : For, about the rising of the Dog-Star, there is so great a Calmness of the circumfus'd Air on the Top of the Mountain.

725 The DAYS may longer grow, and vig'rous LIGHT
 Unwillingly give place to drowsy NIGHT;
 And sometimes sleepy NIGHT may longer stay,
 And slowly wake before approaching DAY:
 Because the SUN might walk the constant Rounds
 730 In crooked Paths, and in uneven Bounds;
 Nor into equal Parts the GLOBE divide,
 Now longer here, and now on th'other side,

Until

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tain, that the highest Part of it is above the least Breath of Wind: and even, while it is yet Night, the Sun is seen to rise, not in a globous and circular Figure, but in a Flame dispers'd here and there in such a manner, that many Fires seem to touch the Horizon: but all of them in a short space of time contract themselves into one Magnitude, which takes up the space of about three hundred Foot, and at length the Day appearing, the compleat Magnitude of the Sun appears likewise, and shines with its accustom'd daily Light.

725. The Days, &c.] It has always been accounted a wonderful Thing that the Days and Nights lengthen and shorten so regularly in the Course of the Year, that the alternate Changes of the Length and Shortness of both of them are exactly vary'd by Turns both in Summer and Winter: Of this the Poet assigns three Causes. I. It may happen, says he, because the Sun makes his Rounds above and below the Earth more swiftly at some times than at others; inasmuch as the Ways or Places, thro' which he travels, are longer or shorter. This is contain'd in 17. v. in which he likewise describes the unequal Segments of the diurnal and nocturnal Circles in the oblique Position of the Sphere: but from this Rule he excepts the Equator, which in

every Obliquity is divided from the Horizon into two equal Parts: and this is the Reason that the Sun, being twice within the Year plac'd in the Equator, makes two Equinoxes in all Countreys whatever. II. Then he adds in 4. v. another Reason, and says, that there may perhaps be certain places in the Sky, where the Sun finds more or less Resistance, and this may retard or hasten his Course. III. He says it may happen, because those Fires that either compose or kindle the Sun, may, at certain Seasons of the Year, assemble and meet more slowly in the Eastern Sky, than they do at others.

The first of these is the true and genuine reason: for the Inequality of the Days and Nights proceeds from the oblique Position and Site of the Zodiack: whence it comes to pass, that they, who have a perpetual Equinox, that is to say, those that live under the Equator, never have the least Inequality, but a constant Equality, of Days and Nights, because they inhabit under a strait and direct Sphere: But those that live towards either of the Poles, have their Days and Nights longer or shorter, according as they are more remote from the Pole, or nearer advanc'd to it. But such, as live in the most oblique Sphere, that is to say, under either of the Poles, have six Months of continual

Until it comes, and warms with neighb'ring Rays
The LINE, and measures equal Nights and Days,

The

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nual Light, and by turns as many of continual Night and Darkness: Therefore 'tis no wonder what Pliny, lib. 4. cap. 12. says of them, that they, *serere matutinis, meridie metere, occidente sole fœtus arborum decerpere, noctibus in specus condi, &c.* sow in the Morning, reap at Noon, gather the Fruits of the Trees at Sunset, hide themselves in Caverns at Night, &c. And thus we know,

*Quid tantum oceano properent se
tingere soles*

*Hyberni: vel quæ tardis mora
noctibus obstat.*

Virg. Georg. 2. v. 481.

What drives the Chariot on of
Winter's Light,
And stops the lazy Waggon of
the Night.

As Cowley expresses it.

733. Until, &c.] In this and the following six Verses Lucretius describes the Equinoctial Circle; which by the Greeks is call'd, *ἰσημερινός*; by the Latines *Æquidialis, Æquinoctialis, Æquator*, and *Cingulum Mundi*: and by Mariners, it is commonly call'd the Line. It is one of the greatest Circles of the Sphere: it's Poles are the same with the Poles of the World; from either of which it is equally distant, and divides the Celestial Globe into the northern and southern Hemisphere. Christoph. Clavius in *Sacrobosc.* describes it by an imaginary Line, drawn from the Centre of the World, and extended to the first Point, either of Aries or Libra, and thence carry'd about by the diurnal Revolution of the Primum

Mobile. Of this Equinoctial Circle these Things chiefly deserve to be observ'd: I. That it parts as well the Terrestrial as the Celestial Globe, and is divided into 360 Degrees, as every other greater or lesser Circle is, because of the easy Division of this Number into a Moiety, a third, a fourth, fifth, sixth, or eighth; its sixth, for Example, being sixty, which Number admits of many more Divisions without any Fractions. II. The Sun, being posited in the Equinoctial, makes the Days and Nights even, and then the Equinoctial divides the Sphere into the Northern and Southern Hemispheres, whose Poles are the Poles of the World. III. Fifteen Degrees of this Circle rise hourly on one Part, and as many set every hour on the other; so that one Degree of it rises every four Minutes of an Hour. For which reason the Equinoctial is said to be the Measure of the Primum Mobile. IV. This Circle shews the Equinoctial Points, which happen twice every Year; 1. about the eleventh of March, when the Sun enters into the first Degree of Aries: 2. about the thirteenth of September, when he enters into the first Degree of Libra. V. It divides the Zodiack into two Moieties, the Southern and the Northern, and thence the Signs are distinguish'd into those of the North and South. VI. It is the Measure of Time, and shews what Declination the Stars, or the Parts of the Ecliptick have, either northern or southern. VII. Lastly, in this Circle are observ'd the Ascensions and Descensions of the Zodiacal Signs.

735. Between

735 The LINE lies just between the NORTH and SOUTH,
And leaves an equal Distance unto both,

Be-

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735. Between the North and South] That is, between the North and South Poles; Lucretius says, *Medio cursu flatus Aquilonis & Austri*, which are indeed two Winds, the first of which blows from the North, the last from the South, and which are commonly taken by Poets for the North and South Points or Poles of the World.

736. An equal Distance unto both] *Lucr. Distinet aquato cœlum discrimine metas*: where by *metas*, he means the two Tropicks of Cancer and Capricorn, which are the utmost Bounds of the Sun's Revolution, and which he never passes. They were call'd Tropicks from the Greek Word *τροπή*, which signifies Conversion, or Turning; because the Sun, when he comes at those Circles, turns back again towards the Æquator; nor ever goes beyond those Bounds, either to the North or South: Hence the Egyptians, as Clemens Alexandrinus, lib. 5. *Stromat.* observes, hieroglyphically describ'd the Tropicks under the Figure of two Dogs, as if they were Guards, deputed by Nature, to keep in and restrain the Sun from running beyond his Bounds. The first among the Greeks, who found out these Tropicks, is said to be Thales, the Milesian: who likewise writ a particular Treatise of them, as Eudemus in Laërtius witnesses. The Tropick of Cancer is call'd *τροπικὸς θερινός*, i. e. *Tropicus æstivus*, from the Heat of Summer, which we in this northern Hemisphere enjoy, when the Sun is nearest to that Circle; which is thus describ'd: A smaller Circle, parallel to the Æquator, whose distance from thence is equal to

the Sun's greatest Declination, or the Obliquity of the Zodiack, which it touches in the first Point of Cancer. Its Office, on one side, is to terminate the Torrid Zone, and, on the other, the northern Temperate Zone, and to make the Summer Solstice and longest Day northward, and the Winter Solstice or shortest Day southward. The Tropick of Capricorn is likewise describ'd; a smaller Circle, parallel to the Æquator, whose Distance from thence is equal to the Sun's greatest Declination, and touches the Ecliptick in the first Point of Capricorn; on one side, bounding the Torrid Southern Zone, on the other, the Southern Temperate Zone; making the Winter Solstice or shortest Day northward, and the Summer Solstice, and the longest Day southward. Moreover, the Solstices were so call'd, because the Days do then increase and shorten so very slowly, that they can scarce be perceiv'd to do either, inso-much that *quasi sistatur Sol*: The Reason of which cannot be better given, than in the Words of Julius Scaliger in *Problemat. Gellian.* *Is circulus, quem Sol quotidie signat, non est circulus, sed magis quædam spira. Neque enim revolutionis finis eodem committitur, unde initium habuerat: Major enim distantia est à puncto, unde digressus est, ad punctum, ad quem horæ viginti quatuor eum perduxere; ubi propior sit iis signis, quæ propius ad Æquinoctium accedunt, propter obliquitatem. Itaque cum tendit ad solstitia, propter lineæ prope rectitudinem, vix variat; inde solstitia dicta:* Which is as much as to say: That

Because the ZODIACK is oblique,——

Thro' which the SUN his yearly Walk does go,
And views obliquely all the World below;

740 Thus teach Astronomers; and this confess'd
A fair Opinion; probable at least.

Or else the AIR is thick, and stops the Ray,
Nor gives the Sun a free and easy way.

And this prolongs the tedious winter Night,

745 The DARKNESS slowly yields to ling'ring LIGHT.

Or else at certain Seasons of the Year,

The FLAMES meet slowly in the EASTERN AIR,

And frame the SUN, and make the Day appear.

But

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That Circle, which the Sun describes by his daily Motion, is not properly a Circle, but rather a spiral Line: For the end of its Revolution does not terminate in the Point, whence it began. For its Distance from the Point, from whence the Sun set forward, to that to which he arrives by his daily Course of twenty four hours, is greater when he approaches nearest to those Signs, that are next the Equinoctial, by reason of the Obliquity of his Course: But when he draws near to the solstitial Points, there appears scarce any Variation of his Course, because the Line is then almost strait and direct: whence it is call'd the Solstice. Moreover, Macrobius, lib. 1. cap. 21. tells us, That the Egyptians represented the Statue of the Sun with his Head shav'd on one side, and having long hair on the other, to intimate, by the first, the time of the winter Solstice, cum velut abrasis incrementis, angustâ manente exstantiâ, ad minimum diei Sol pervenerit spatium: by the later, his summer Solstice, or his full-grown Splendour, to which he arrives by Degrees, emerging again, from those Streights and Dens, which were his abode in the Win-

ter Tropick, into the Summer Hemisphere: ex quibus latebris vel angustis rursus emergens, ad æstivum hemisphærium tanquam enascens in augmenta porrigitur: as the same Authour expresses it in the Place above-cited. See above, v. 658.

737. Zodiack, &c.] Of this see above, v. 661.

742. Or else, &c.] These 4. v. contain a second Cause or Reason of the Increase and Decrease of the Days and Nights: But this is indeed a weak Argument: For how can the Air's being more or less thick make the Sun rise later or sooner?

746. Or else, &c.] in these 3. v. he alledges a third Reason, which is of equal Force with the last: as if the Days or Nights were longer or shorter, because the Seeds of Light flow, and meet together, sometimes sooner, sometimes later, to repair the decay'd Splendour of the Sun. But by subjoining this third Cause, the Poet seems to observe, what is likewise generally taken notice of, that not only the Day and the Night, but that the morning and the evening Twilight, are sometimes shorter than they are at others: For, in an oblique Sphere, the Duration, as well of the

But more : the Moon may shine with borrow'd RAYS,
 750 Her various LIGHT increasing with the Days,
 As She the farther from the SUN retires,
 And with FULL FACE receives his scorching FIRES:
 When FULL, oppos'd, She, climbing up the EAST,
 Views him below fall headlong down the WEST.

And

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the Twilight before Sun-rising, as of the Twilight after Sun-set, is unequal throughout the Year; being longer in the Summer, and shorter in the Winter; because, since the Twilight either begins in the Morning, or ends in the Evening, when the Sun is eighteen Degrees, perpendicularly taken, below the Horizon, the Bows of the Compass or Circuit of the Sun, who, with those Degrees either rises in the Morning, or goes down in the Evening, are larger in Summer, and less in Winter: Besides, this Inequality is the greater, the more distant we are from the Æquator. And yet we may not believe, that the evening Twilight is longest about the summer Solstice and shortest about the winter: for indeed it is rather somewhat shortest of all before the vernal, and after the autumnal Equinoxes. But it might seem tedious to pursue these Matters farther.

749. But more : &c.] Here the Poet inquires into the Causes, why the Moon changes her self into so many shapes: for as Ovid *Metam.* 15. v. 196. says,

*Nec par, aut eadem nocturnæ
 forma Dianæ
 Esse potest unquam; semperque
 hodierna sequente,
 Si crescit, minor est; major, si
 contrahit orbem.*

Which Dryden thus translates,

Not equal Light th' unequal
 Moon adorns,
 Or in her waxing, or her waning
 Horns:

For ev'ry Day she wanes, her
 Face is less,
 But gath'ring into Globe, she
 fattens at Increase. Dryden.

Now Lucretius tells us in these 12. v. That if she receive her Light from the Sun, if she be a globous Body, and lastly, if she make her Rounds below the Sun, then they explain aright her various and manifold Phases, who say, that the Moon changes her Face according to the different Light she receives from the Sun, as she approaches nearer to him, or retires farther from him. This too is the Opinion of almost all the Mathematicians, and of all the Poets, especially of Manilius, lib. 2. v. 96.

*Tu quoque fraternis reddis sic
 oribus ora,
 Atque iterum ex iisdem repetis,
 quantumque reliquit,
 Aut dedit ille, refers; & sydus
 sydere constas.*

Which Creech thus renders:

For as the Moon in deepest Dark-
 ness mourns,
 Then Rays receives, and points
 her borrow'd Horns;
 Then turns her Face, and with a
 Smile invites,
 The full Effusions of her Bro-
 ther's Lights.

755 And so her LIGHT decrease as She goes on
Thro' diff'rent SIGNS, approaching near the SUN.
And thus the PHASES are explain'd by all
That think her SHAPE is ROUND, the MOON a BALL,

And

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755. Decrease as she goes on] For when the Moon is at full, she goes, as it were, backwards under the Earth towards the Sun, and comes up to him: whence it is, that she decreases by Degrees, till being in Conjunction with him, she become invisible to us.

756. Diff'rent Signs, &c.] He means that Part of the Heavens, which is conceal'd from us beneath the Earth.

757. The Phases, &c.] The different Changes or Variations of the Moon, which the antient Greeks call'd *φάσεις*, and from them the Latines, Phases, or Apparitiones: The Names of these Phases or Appearances, especially of the four chief and most remarkable, are these. The first, reckoning her Changes as she increases, is *Μηνοειδής*, i. e. corniculata, horn'd, or having Horns: The new Moon, which happens when she is about sixty Degrees distant from the Sun. This Phase is by the Turks and Arabs call'd Nalka, a Horse-shoo, because the Moon then resembles the Figure of one. The second, *Διχοτόμος*, i. e. bifecta, or dimidiata, The Half-Moon, when she is ninety Degrees distant from the Sun: The third, *Ἀμφικυρτός*, i. e. gibbosa, or dimidio orbe major; which happens at a 120 Degrees distant from the Sun; and the fourth and last *Πανσέληνος*, i. e. Totilunis, when full, and in opposition to the Sun, or at the Distance of 180 Degrees: and from this last,

in a contrary Order, are reckon'd her decreasing Changes. And these several Phases she inviolably observes; nor are they the Work of Chance, as our Poet would impiously insinuate; but the Act and Order of Divine Providence; as even another Poet, tho' a Heathen too, saw very well:

Nec lunam certos excedere luminis orbes;
Sed servare modum, quo crescat, quove recedat;
Nec cadere in terram pendentia sydera coelo,
Sed dimensa suis consumere tempora signis;
Non Castus opus est, magni sed Numinis ordo.

Thus render'd by Creech:

That Light, by just Degrees, the Moon adorns;
First shews, then bends, then fills her borrow'd Horns;
And that the Stars in constant order roul,
Hang there, nor fall, and leave the liquid Pole;
'Tis not from Chance: The Motion speaks aloud
The wise and steady Conduct of a God.

To which I add this of Statius, Sylv. lib. 3.

Servit & astrorum velox chorus,
& vaga servit
Luna, nec injussæ toties redit orbita lucis.

U u u

And

And place her circling ORB below the rest :
760 A fair Opinion, probable at least.

Tho'

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And of Macrobius in Somn. Scip. lib. 1. cap. 6. Similibus dispensationibus Hebdomadam, Luna sui luminis vices sempiternâ lege variando disponit.

And since we are upon the Subject of this Planet, I cannot but take notice of an opinion, which is at this day asserted and maintain'd by several, as well Philosophers as Astronomers : viz. That the Moon is inhabited : This Belief they ground on the appearance of Mountains, Valleys, Woods, Lakes, Seas and Rivers, which, by the help of the Telescope, they discover in the Orb of that Planet. The Antients, as Cicero witnesses, embrac'd this Opinion long ago : Habitari, says he, ait Xenophanes in Lunâ, eamque esse terram multarum urbium & montium. Acadêm. Quæst. lib. 4. The Interpreter of Aratus : εἶναι δ' ἐπ' αὐτῆς οἶκας ἀνὰ πόλιν αὖτις τὸν ὅσα ἐπὶ γῆς, And Plutarch De Placitis Philosoph. lib. 2. cap. 30. reports, That the Pythagoreans affirm the Moon to be another Earth, inhabited in all its Parts, even as this Earth of ours : and peopled with living Creatures fifteen times larger than those with us : These Inhabitants the Antients call'd Antichthones, because they believ'd them to dwell in an Earth quite opposite to this of ours. And that Authour, in his Treatise, De facie in orbe Lunæ, says, That there are Caverns in the Moon, call'd Penetralia Hecates ; and that the upper Parts of that Planet, which always regard the Heavens, are the Elyzian Fields : That it is likewise inhabited by Genii, who not always make their Abode there, but some-

times descend to Earth, to punish or awe Mankind : Achilles Tatius in Isagog. reports also the like of the Moons being inhabited : so too does Macrobius in Somn. Scip. lib. 1. cap. 11. in these Words : Lunam ætheream terram Physici vocaverunt, & habitatores ejus Lunares Populos nuncuparunt : quod ita esse pluribus argumentis, quæ nunc longum est enumerare, docuerunt. See more to this purpose in Kepler's Astronomia optica, and particularly in a posthumous Treatise of his, intitul'd, Somnium, five de lunari Astrologiâ. Now why should this Opinion seem extravagant, if it be admitted, that the Moon enjoys as favourable an aspect from the Sun, as this Earth of ours : tho' the Days and Nights there be answerable to our Half-months, in regard it is skreen'd with Hills and Mountains, under which lie deep Shades and Valleys, with hollow Caves and Recesses, of equal Benefit against the Extremities of Heat and Cold : and being water'd besides with great Lakes and Rivers, and consequently supply'd by Nature with all Things necessary for the support of Life ? How then can it reasonably be thought, that Nature has conferr'd all those Advantages and Benefits for no Use and End ; and that the Moon is made for no other purpose, and serves only to reflect to us the Light of the Sun ? See more in Isaac Vossius in his learned Treatise, de Naturâ & Propriet. Lucis, cap. 19.

After all, it is not agree'd, what Kind of Creatures these Lunary Inhabitants are : However Kepler seems somewhat positive as to this Point also : Concludendum

Tho' PROPER LIGHT the MOON's pale FACE should fill
 Yet it might shew the diff'rent PHASES still:
 Because, as that bright Body rould above,
 Another DARK, UNSEEN, THICK thing might move
 765 Beneath, and stop the Rays, divert the Streams
 Of falling Light, and turn away the Beams.
 Or else, if like a BALL, half dark, half bright,
 Roul'd round its Axle, may affect the Sight
 With diff'rent PHASES, and shew various Light:

Now

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cludendum videtur, says he in his Notes, ad appendic. Selenograph. in Lunâ creaturas esse viventes, rationis, ad ordinata faciendâ, capaces. He affirms the same Thing of the other Planets, nay even of the Sun itself; concerning which, in the Epilogue to his fifth Book, he breaks out into this Expression: Vel sensus ipsi exclamant, ignea hic habitare corpora, mentium simplicium capacia, verèque solem esse *σὺν ὅσῳ νοεῖται* si non regem, at saltem regiam. Nor is this so strange as what some assert, who maintain the Moon to be the Paradise in which our first Parents were created, and from whence, for their Transgression, they were expell'd, and driven down to this Earth of ours. This Hieronymus Vitalis, in Lexic. Mathemat. in voce Paradisus, endeavours to evince, as well from Reason, as from the Authorities of several of the Fathers and Schoolmen. He says indeed, That this is new and unheard of, but not therefore to be accounted foolish and absurd; Fateor, says he, id novum, singulare, & hactenus inauditum, at non per hoc temerarium, atque intolerabile dixeris: Then he urges in these express words; modo partâ tantâ rerum notitiâ, lunæ facie Telescopio penitissimè observatâ, veterum dictis expensis, locis super hanc terram investigatis, Paradisum in Lunæ

superficie collocari, ratio ipsa compellit. The Reader may be farther satisfy'd as to this Matter in that Authour; but it is time for us to return to Lucretius.

761. Tho' proper, &c.] In these 6. v. he assigns another reason, and says, That if the Moon do shine with unborrow'd Light, then we must imagine that another Body, which is opacous and totally dark, always moves with the Moon, and obstructs and turns away her Beams.

This is said to be the Opinion of Anaximander; who nevertheless believ'd nothing like it: For tho' he did perhaps say, That the Moon ἰδίον ἔχεν φῶς * had her own Light. Plut. de Placit. Philosoph. lib. 2. cap. 26. and 28. (ἐφάσκειν τὸ σελήνην ψευδοειδῆ, τὸ ἀπὸ ἡλίου φωτίζεσθαι. Laërtius,) yet he never so much as dreamt of any other Body, that mov'd about with her, and hinder'd and obstructed her Light.

762. Phases, &c.] See the Note above. v. 757.

767. Or else, &c.] In these 29. v. he proposes their Opinion, who held the one Half of the Moons Orb to be light, the other Half, dark: Now, says he, if you imagin this Opinion to be true, imagin likewise such an Orb to be turn'd round on its Axle, or Centre, and it will present the different Phases we behold in the Moon.

770 Now turn that HALF, which the FULL LIGHT adorns,
A QUARTER now, now dwindle into HORNS.
And this the later BABYLONIAN Sect
Asserts, and the CHALDEAN Schemes reject:

As

NOTES.

This was the Opinion of Berosus, a famous Astronomer in the Days of Antiochus Soter, as also of the Babylonians, who defended this Doctrine against a Sect of the Chaldean Astronomers: who as Diodorus Siculus, lib. 2. witnesses, agreed with the Greeks, that the Moon shines with Light that is not her own: but the Babylonians held one half of the Moons Globe to be luminous, the other, dark. And that both the Chaldeans and Babylonians too were very skilful in Astrology, we have the Testimonies of Diodor. lib. 1. de divin. Pliny lib. 7. c. 56. and many others: Nay Manilius lib. 1. v. 38. teaches, That Astrology was given by the Gods to the Kings of the Chaldeans: for it was God, says he,

Qui sua disposuit per tempora,
cognita ut essent
Omnibus, & mundi facies, cœ-
lumque supernum,
Naturæque dedit vires, se quæ
ipsa reclufit,
Regales animos primum dignata
movere,
Qui domuere feras gentes Ori-
ente sub imo,
Quas secat Euphrates, in quas &
Nilus inundat.

At whose command the Stars in
order met,
Who Times appointed when to
rise and set;
That Heav'n's great Secrets might
lie hid no more,
And Man, instructed, gratefully
adore:
Nature disclos'd her self, and
from her Springs
Pure Streams deriv'd overflow'd
the Minds of Kings;

Kings next to Heav'n, who o'er
the East did sway,
Where swift Euphrates cuts his
rapid Way;
Where Nile o'erflows, and whence
the Whirl restores
The Day to us, and, passing,
burns the Moors.

Creech.

772. And this, &c.] This and
the following Verse run thus in
the Original.

Ut Babylonica Chaldaicum do-
ctrina refutans
Astrologorum artem contra con-
vincere tendit.

Upon which Passage, if Faber's
Note be true, our Translatour
seems to be mistaken in the sense
of his Authour: For that Inter-
preter there says, That by Baby-
lonica Chaldaeorum ars, our
Poet here means only those Chal-
daans, who follow'd the Hypo-
thesis of Berosus against the vul-
gar Astrology: What it was,
says he, Plutarch teaches, de Pla-
citis Philosophorum lib. 2. where
he asserts, That an Eclipse of
the Moon is caus'd $\kappa\tau' \tau\lambda\omega \pi\epsilon\rho\varsigma$
 $\eta\mu\acute{\alpha}\varsigma \epsilon\pi\iota\sigma\theta\eta\lambda\omega \tau\tilde{\eta} \alpha\pi\upsilon\rho\omega\tau\epsilon \mu\acute{\epsilon}\rho\epsilon\varsigma$,
i. e. by her turning towards us
that Part of her Orb which is
not fry. Then he subjoins, that
the Chaldeans in this Place is
the Name of a particular Sect,
not of the whole People, as
might be prov'd out of Herodo-
tus. To which I add this of
Laërtius, $\omega\alpha\rho\alpha \delta\epsilon \beta\alpha\beta\upsilon\lambda\omega\nu\iota\sigma\iota\varsigma$,
 $\eta \alpha\sigma\tau\upsilon\rho\epsilon\iota\sigma\iota\varsigma \chi\alpha\lambda\delta\alpha\iota\omega\iota$, $\Gamma\upsilon\mu\upsilon\sigma\sigma\omicron$
 $\phi\iota\sigma\alpha\iota \omega\pi\alpha \iota\upsilon\delta\omicron\iota\varsigma$. And with
this agrees Cicero, lib. 2. de Di-
vinat.

OF

OF THE
ORIGINAL and PROGRESS
OF
ASTRONOMY
Among the ANTIENTS.



ASTRONOMY had its Name ἀπὸ τοῦ νόμου τῶν ἀστέρων, because it teaches the Laws and Rules of the Motions of the Stars: But the Words Astronomy and Astrology were anciently promiscuously us'd one for the other: For what Plato calls Astronomy, Aristotle and others call Astrology. Thus Salmasius in Plin. Exercitar. Tom. i. p. 6. says, That among the Greeks Thales is said first ἀστρολογῆσαι, to astrologize, tho' he never treated of the Judiciary Art. In like manner, Pherecydes was call'd an Astrologer, tho' he was only an Astronomer: and the Nautical Astrology of Phocus the Samian, which some ascribe to Thales, treats only of the Astronomical Science. Manilius, on the contrary, calls his Poem ASTRONOMICON, tho' all of it, except the first Book, treat of judiciary Astrology. But in After-Ages this Synonymy was discontinu'd: for when the apotelesmatick Part, which, from the Site and Aspect of the fixed Stars and Planets, teaches to divine their Influences, as to the Production of future Events, came to get footing in Greece, where antiently only the Meteorologick Part of it, which teaches the Motions of the Stars, was known, they distinguish'd them, and gave to the first the Name of Astrology, and call'd the last Astronomy; which is properly understood, and describ'd to be, THE SCIENCE, which contemplates the Motion, Distance, Colour, Light, Order, Place, Magnitude, and the like Adjuncts of the Fixed Stars,

Stars, and of the Planets, without any respect to the judiciary Part.

And as this Science itself, so the Professours of it too were in like manner doubly distinguish'd. Plato, in Epinomide uses the Words *Ἀστρονομῆες* and *Ἀστρονόμοι*, in different Sences : He understands, by the first of them, those who apply themselves to discover the Rising and Setting of the Stars, in order to prognosticate concerning the Seasons of the Year, and the Temperature of the Air : By the last of them, he means those who particularly confine their Studies to the Theory of the Planets.

The Original of ASTRONOMY, says Gassendus, proceeded from Admiration ; *Originem ipsi ipsa fecit admiratio*. *Introduct. Astronom.* For our Forefathers, astonish'd at the Splendour, Variety and Multitude of those glorious Bodies, and observing their constant and regular Motions, apply'd themselves to the Study of this Science, and transferr'd their admiration into Observations, which, in Process of time, they mark'd down in Tables, or Parapegma's, for the Instruction of Posterity : And for this reason Ricciolus, in his Preface to the first Tome of the New Almagest, affirms ASTRONOMY to be almost coeval with the Stars themselves : And that, together with other Arts divinely infus'd, it was reduc'd into Experiment and Practice by Adam himself, who, according to Suidas, was the Parent and Authour of all Arts and Doctrines ; *τέτε*, says he, *πάντα ἐνέμαλα ἢ διδάγματα*. Besides, that Adam particularly instructed Seth in this astral Science, and that too by Writing, is the Opinion of all the Jewish and Arabian Doctours ; and among them, particularly of Gelaldinus Arabs, cited by Kircher in *Obelisc. Pamphil.* p. 5. if he be the Authour of the Book, which goes under the Title of *Liber Creationis* ; of which some are in doubt, even tho' it be commented upon, as such, by Rabbi Abraham, and Rabbi Joseph Ben Uziel : But however that be, Josephus, in the eleventh Book of the Jewish Antiquities, writes, that Seth, having been instructed in Astronomy by Adam, and knowing that the World was twice to be destroy'd, once by Water, and once by Fire, reduc'd this Art to an Epitome, and for the Information and Benefit of Posterity, ingrav'd it on two Pillars, one of Brick, the other of Stone ; the first to preserve it from the Fire, the second from the Deluge ; which last Pillar he affirms to have been remaining

maining in his Days at a Place call'd Syrias or Seirath, which If. Vossius, lib. 1. de *Ætate Mundi*, supposes to be the Land that borders on Mount Ephraim, not far from Jericho.

Seth, the Son of Adam, having thus engrav'd on two Pillars, the Theory of this celestial Science, which he had receiv'd from his Father; and ASTRONOMY being thus brought into the World, the succeeding Patriarchs, who, by reason of their Longevity, had the Opportunity of observing many astral Revolutions, cultivated and improv'd it: Nay, some of the Jewish Doctours, particularly Rabbi Isaac Abarbenel in *Dissertat. de longævitæ prim. Patr.* goes so far as to affirm, that the Lives of the Patriarchs were, by the Divine Providence, miraculously prolong'd for no other End, than that they might apply themselves to the Study of this celestial Science: in which the most celebrated for his Knowledge is Enoch, whose Books on that Subject are said to be extant to this Day in the Territories of the Queen of Sheba, as Vossius de *Scientiis Mathematicis* affirms: at least they are several Times cited by Tertullian and Origen.

It is not certainly known to what Degree of Improvement this Science was brought before the Flood: but from the Testimony of Origen, citing the above-mention'd Books of Enoch, it appears; That the Stars were then reduc'd into Asterisms, under peculiar and distinct Denominations, concerning which that Patriarch, who was the Seventh from Adam, writ many secret and mysterious Things. Besides, it is evident from Scripture itself, That the Year was then, as it is now, computed by twelve Revolutions of the Moon, to one of the Sun's through the Zodiack: For it is said expressly in Genesis, That Noah enter'd into the Ark the seventeenth Day of the second Month, and went out of it the twenty seventh Day of the second Month of the Year following: In the same Book likewise express Mention is made of the seventh and tenth Months: From whence we may with good Reason infer, That the Patriarchs had then the Knowledge of the Courses of the Sun and Moon, with their Periods, and, in all Probability, of the other Planets also.

After the Flood, when Mankind came to be scatter'd over the Face of the whole Earth, Astronomy began to be study'd by several Nations, who, no doubt, had their first Knowledge of it from Noah and his Posterity: And hence arose the Contest for the Honour of its Invention. But
since

since it cannot be deny'd, that Mankind dispers'd themselves out of Asia into Africk, Europe, and other Parts of the World, the Asiatics may justly claim to themselves the Glory of it; and among them chiefly the Babylonians, Chaldeans, and Bactrians: of whom the most renown'd for their Skill in this Science are Evahdnes, Belus, Zoroaster, and Oranes: as also Cidenas, Naburianus, Sudinus, and Seleucus the Chaldean.

From the Assyrians and Chaldeans it came to the Egyptians, being brought thither by Abraham the Patriarch, as Eusebius, lib. 9. Præparat. Evangel. proves from the authority of Josephus, Eupolemus, Artapanus, and others, as they are cited by Alexander Polyhistor: But Eupolemus seems to infer that Abraham, before his Descent into Ægypt, taught it to the Phœnicians. Others however say, that Mercury first taught the Egyptians Astronomy, and indeed all other Arts and Sciences. This is positively asserted, not only by Jamblichus, but by Plato in Phœdrus, where he calls him *παλιν γεγραμμάτων*, and by Cicero, lib. 3. Divinat. Vide etiam Lactantium, lib. 1. cap. 6. There are others who attribute the Honour of it to the Egyptians before the Chaldeans, who, say they, were even themselves first instructed in it by the Egyptians: To make good which Assertion they produce the Testimonies of Diodorus Siculus. Bibliothec. lib. 1. and of Hyginus Fabul. 271. the first of whom says, that Babylon was a Colony of the Egyptians, founded by Belus of Libya, who instituted there a College of Priests, to the end they might contemplate the Stars in the same manner as those of Egypt: The last, that one Evahdnes is said to have come from beyond the Seas into Chaldæa, and there to have taught Astronomy.

But if this Science were known to the Egyptians, before it was to the Babylonians and Chaldeans, how comes it to pass, that the Egyptian Observations are so much later than those of the Babylonians? For we scarce find any of the Egyptian to precede the Death of Alexander the Great; than which even those of the Greeks are earlier: But the Babylonian Observations were manifestly made almost two thousand Years before that time. And Cicero, lib. 1. de Divinat. ascribes it first to the Assyrians: The Assyrians, ut ab ultimis auctoritatem repetam, says he, by reason of the Plainness and large Extent of their Countrey, which afford-

ed them on all sides a clear and open View of Heaven, observ'd the Course and Motion of the Stars: And having fram'd a due Calculation of their Revolutions, they from thence made Predictions of future Events: And amongst the Assyrians, the Chaldeans (*non ex artis, sed ex gentis vocabulo nominati*) arriv'd to such a Perfection of Skill, that they could foretel what should happen to any one, and under what Fate they were born: which Art the Egyptians learnt of them many Ages ago. Thus Cicero.

There are others nevertheless who deny this Honour both to the Chaldeans and Egyptians, assigning the Invention of Astronomy to the Ethiopians: of this Opinion is Lucian, *ἐξ Ἀστρολογίας*. But this Assertion seems of little Weight, it being contrary to the general Stream of Tradition, even long before Lucian's Time.

The Africans too pretend to the Invention of Astronomy; and among them particularly the Mauritanians, who are said to have been instructed in that Science by their King Atlas, the Son of Libya.

ARISTOTLE ascribes the Invention of it wholly to the Babylonians and the Egyptians: *Ἀιγύπιοι, ἢ Βαβυλώνιοι, παρ' ὧν πομπὰς πίσεις ἐχομένη περὶ ἐκάστη τῶν ἀστρῶν*. And how the Egyptians came to be skilful in that Science, Ptolomy, who was himself of Egypt, gives us this reason, *ὅτι μάλλον συνοικεῖν τοῖς Διδύμοις, ἢ τῷ τῷ Ἑρμῇ*. And why? *διόπερ Δακτύλιχοι τὲ ἢ συνελοὶ ἢ ὅλως ἱκανοὶ περὶ τὰ μαθήματα*. Of the Babylonians he says, *ὅτι τῇ παρθένῳ ἢ τῷ τῷ Ἑρμῇ συνοικεῖν, διὸ ἢ παρ' αὐτοῖς τὸ μαθηματικὸν ἢ ἀστρονομικὸν τῶν ἀστέρων συνέπε*.

Thus from the several Nations before-mention'd, Astronomy seems to have been antiently divided into three different and chief Sects, that is to say, the Assyrian, under which is comprehended the Babylonian and the Chaldaick, the Egyptian, and the Mauritanian or Atlantick: Of which last nevertheless the Romans made no account; for among them were enumerated only these three Sects, the Chaldaick, Egyptian and Grecian: Now Eudoxus is said to have been the first, who from the Egyptians brought Astronomy to his Countreymen the Greeks: and Berofus to have brought into Greece the Science of Generhialogy from his

Countreymen the Chaldeans. Vitruvius, lib. 9. cap. 7. Eorum autem inventiones, quas scriptis reliquerunt, qua solertia, quibusque acuminibus, & quam magni fuerint, qui ab ipsa Chaldæorum natione profluxerunt, ostendunt: Primusque Berosus in insulâ, & civitate Coâ consedit, ibique aperuit disciplinam. And Pliny says, that the Athenians publicly erected a Statue with a golden Tongue to Berosus, for his divine Predictions. After him Antipater and Achinapolus were reputed famous Genethliologists. Of Natural Causes and Effects, Thales, Anaxagoras, Pythagoras, Xenophantus, and Democritus are esteem'd the most eminent Observers. After them, following their Inventions, and observing besides the Rise and Setting of the Stars, and the Seasons of the Year, Eudæmon, Callisthus, Melo, Philippus, Hipparchus, Aratus, &c. left to Posterity their Astrological Prognosticks, in their Tables, which are call'd *Parapegma's*: Of which see Geminus and Theon in *Arati Phænomen.* Thus tho' it be certain, that the Greeks deriv'd their Knowledge in Astronomy from the Chaldeans and Egyptians, yet so great was their Presumption, as confidently to affirm, that the Invention of it was due to them, particularly to the Rhodians, from whom they pretend that the Egyptians receiv'd it, as Diodorus Siculus reports in the Story of the *Heliadæ*: And lastly, others of them ascribe its Original to their Poet Orpheus: but those Opinions favour too much of the Fable: and therefore we may rather subscribe to their Belief, who hold, That Thales the Milesian first brought Astronomy into Greece, having deriv'd his Knowledge in that Science from the Egyptians.

After Thales, it was improv'd by Anaximander, Anaximenes, Anaxagoras, Democritus, Empedocles, Euctemon, Meton, Eudoxus, and others of the Athenian School, till the time that Alexander the Great founded the City of Alexandria in Egypt. After which the Ptolemies, his Successors, having erected there an Academy for all manner of Studies, the Grecian Astronomy made its retreat thither; and flourish'd under those Princes in equal Glory with the Egyptian: And from thence we hear of the famous Names of Autolychnus, Calippus, Timochares, Aristyllus, Eratosthenes, Conon, Hipparchus, Sosigenes, Theon the Elder, Ptolemy, Paulus the Alexandrian, Theon the Younger, furnam'd likewise the Alexandrian, and his Daughter, the excellent, but unfortunate, Hypatia.

It was long before Astronomy was introduc'd into Italy, or had any Professours among the Romans: For tho' Dion Prusieus in Orat. 49. affirm, That the Pythagoreans instruct-ed the Italians in that Science, and that in all Probability the Doctrine of Philolaus, Timæus, Archytas, and others, the Fame of whose Learning had invited even Plato himself to make a Voyage into Italy, could not have been conceal'd from the curious and ingenious Romans; yet that martial People, who were more addicted to Arms than Arts, entertain'd but late and slowly too, these speculative Studies: Nor, to pass by the rude Sketches of Numa Pompilius, does the Roman History mention any Persons, as considerably knowing in Astronomy, before Caius Sulpicius Gallus, who was Legate to Æmilius Paulus, in the War against Perseus, King of Macedon, and who first among them publish'd a Treatise of Eclipses. After him, we read That Lucius Taruntius, Nigidius Figulus, Varro, and Cicero apply'd themselves to the Study of Astronomy: But to none of the Romans is that Science so much indebted, as to their Great Dictatour C. Julius Cæsar, who, as Lucan witnesses,

————Media inter prælia semper
Stellarum, cælique plagis, superisque vacabar.

And who assisted by the Egyptian Sosigenes, reduc'd the Roman Year to the Course of the Sun, which we yet retain; and writ a Treatise of the Stars in the Greek Tongue. From him the Mathematical Arts, and particularly Astronomy, began to flourish among the Romans: And after his Example, Augustus Cæsar, who was his Nephew and Successour, encourag'd the Study of it.

Let this suffice as a brief Indication of the first Rise and Authours of Astronomy, and of the Promoters of it among the Antients. It would perhaps be too tedious to continue the Progress of it down to these times, and to shew when, how, and by whom it has been improv'd, and brought to that Degree of Perfection, to which it is now arriv'd.

As if it could not either way be done,
 775 But powerful Reasons fix'd our Choice on one:
 But why the MOONS a monthly Round pursue?
 Why one so long, not ev'ry Day a new?
 Why are they fram'd, endure, and always cease
 At this set Time? The Cause is told with ease;
 780 Since other Things at certain Times appear,
 And only then: Thus Seasons of the Year:

First

NOTES.

774. As if, &c.] Here we see that tho' Lucretius, after Epicurus, believ'd the first Opinion to be the most probable, yet he does not condemn the later. And thus too Epicurus in Laërtius, lib. 10. says, that tho' one Reason may seem better than any of the other, for the Solution of any Problem whatever, yet we ought not therefore immediately to condemn all the rest that may be given, if they have any Appearance of Truth, even tho' but one of them can be true.

776. But why, &c.] In these 27. v. he proposes the Opinion of Epicurus, who held that the Moon is created and dies daily, in a certain Form and Figure: In like manner as he held the Sun to be daily extinguish'd in the West, and created again in the East. And that this may be, says he, several other Things demonstrate: For thus, at certain and inviolable Times, the Seasons of the Year follow one another: The Spring precedes the Summer; the Summer the Autumn; the Autumn the Winter; The Winter, the Spring, &c. Ovid. Metam. 15. v. 196. describes in like manner the constant Succession of the four Seasons of the Year, and compares them to the four Ages of Man's Life. I omit the Original for Brevities sake, and will only give Dryden's Translation of it to illustrate this Passage of Lucretius:

Perceiv'st thou not the Process of the Year;
 How the four Seasons in four Forms appear,
 Resembling human Life in ev'ry Shape they wear?
 Spring first, like Infancy, shoots out her Head,
 With milky Juice requiring to be fed;
 Helpless, tho' fresh; and wanting to be led.
 The green Stem grows in Stature and in Size,
 But only feeds with Hope the Farmer's Eyes:
 Then laughs the childish Year, with Flowrets crown'd,
 And lavishly perfumes the Fields around;
 But no substantial Nourishment receives;
 Infirm the Stalks, unsolid are the Leaves.
 Proceeding onward, whence the Year began,
 The Summer grows adult, and ripens into Man:
 This Season, as in Men, is most replete
 With kindly Moisture, and prolific Heat.
 Autumn succeeds; a sober, tepid Age,
 Not froze with Fear, nor boiling into Rage;
 More than mature, and tending to Decay,
 When our brown Locks repine to mix with odious Grey.

Last

First SPRING, and VENUS kindest Pow'rs inspire
Soft Wishes, melting Thoughts, and gay Desire;
And warm FAVONIUS fans th' amorous Fire;
Then

NOTES.

Last Winter sweeps along with
tardy Pace,
Sour is his Front, and furrow'd
is his Face:
His Scalp, if not dishonour'd
quite of Hair,
The ragged Fleece is thin; and
thin is worse than bare.

782. Venus,] For Venus, the
Goddess of Generation accom-
panies the vernal Season; as Lu-
cretius himself elegantly sings at
the Beginning of the first Book;
which Dryden has no less elegantly
render'd in these Verses.

Delight of humane Kind, and
Gods above:
Parent of Rome: propitious
Queen of Love:
Whose vital Pow'r, Air, Earth,
and Sea supplies,
And breeds whate'er is born be-
neath the rousing Skies:

For ev'ry Kind, by thy prolifick
Might,

Springs, and beholds the Regi-
ons of the Light:

Thee, Goddess, Thee the Clouds
and Tempests fear;

And at thy pleasing Presence dis-
appear:

For Thee the Land in fragrant
Flow'rs is dress'd;

For Thee the Ocean smiles,
and smooths her wavy Breast,

And Heav'n itself with more se-
rene and purer Light is bless'd.

For when the rising Spring adorns
the Mead,

And a new Scene of Nature
stands display'd;

When teeming Buds, and cheer-
ful Greens appear,

And Western Gales unlock the
lazy Year;

The joyous Birds Thy Welcome
first express,

Whose native Songs Thy genial
Fire confess:

Then savage Beasts bound o'er
their slighted Food,

Struck with Thy Darts, and
tempt the raging Flood:

All Nature is Thy Gift;
Earth, Air, and Sea,

Of all that breathes the vari-
ous Progeny,

Stung with Delight, is goaded
on by Thee.

O'er barren Mountains, o'er
the flow'ry Plain,

The leafy Forest, and the li-
quid Main,

Extends thy uncontroul'd and
boundless Reign.

Through all the living Regions
Thou dost move,

And scatter'it, where Thou go'st,
the kindly Seeds of Love.

See B. I. v. 1.

Moreover, our Translatour has
repeated this and the two follow-
ing Verses from B. I. v. 19. tho'
his Authour have not.

784. Favonius,] The West
Wind, of which Book. I. v. 21.

Lucretius here calls it Zephyrus:

which is likewise a Wind that
blows from the Equinoctial

West, contrary to the Wind
call'd Subsolanus, which blows

from the Equinoctial East. It
was so call'd from *ζανφόνος*,

that brings Life; because, when
it blows, all things bud and shoot

forth. This Wind was feign'd
to be the Fore-runner of Venus,

because it blows chiefly in the
Spring, with which Season Venus
is said to be most delighted.

785. Flora

785 Then Mother *FLORA*, to prepare the Way,
 Makes all the Field look glorious, green, and gay;
 And freely scatters with a bounteous Hand
 Her sweetest, fairest Flowers o'er the Land:
 Next *HEAT*, and dusty *HARVEST* take the Place,
 790 And soft *ETESIA*'s fan the Sun-burnt Face.
 Then sweaty *AUTUMN* treads the noble Vine,
 And flowing Bunches give immortal Wine:

Next

NOTES.

785. *Flora*,] Lactantius de falsa Religione, lib. 1. calls her *Paula*: for which Vossius there reads *Flaura*: she was, as Verrius in the same Authour says, *Scortum Herculis*, the Harlot of Hercules: but according to others, she was a Roman Dame, who, by her lewd Practices having heap'd up a great deal of Money, bequeath'd her Estate, when she dy'd, to the Commonwealth of Rome. This is certain, That the Senate made her the Goddess of Flowers, Gardens and Meadows: ut pudendæ rei quædam dignitas haberetur, as Lactantius in the Place above-cited tells us: They instituted likewise Festivals in her Honour, call'd *Floralia*, which is confirm'd by Ovid, lib. 5. *Fastorum*:

Convenère Patres, & si benè
 floreat annus,
 Numinibus vestris annua Festa
 vovent,

And the same Poet acquaints us, that these Solemnities were perform'd towards the later end of April:

Incipis Aprili, transis in tempora Maij;
 Alter te fugiens, cum venit,
 alter, abit.

These Festivals therefore were instituted, ut fruges cum arboribus, aut vitibus benè prospe-

rèque florescerent, says Lactantius in the same Place. And in these *Floralia*, vile, impudent Strumpets were wont to dance naked in the Streets to the Sound of Trumpets: to which Custom Juvenal alludes, Sat. 6. v. 249.

—————Dignissima prorsus
Florali matrona tubâ, —————

790. *Etesia*'s,] The *Etesias* are Winds, that blow constantly for about eleven Days together in the Heat of Summer, and chiefly after the Rise of the Dog-Star. Hence they are call'd *Etesia*, which is as much as to say, Annual, from the Greek Word *ἔτος*, a Year. Thus Pliny, lib. 37. cap. 5. & Aul. Gell. lib. 2. cap. 18. Strabo calls them *Subsolani*, of which see above v. 784. others West Winds, and others East, and Lucretius in this Place makes them North Winds: *Etesia flabra Aquilonum*. See more B. VI. v. 718.

792. And flowing Bunches. &c.] *Lucr. Graditur simul Evius Evan*. Bacchus was call'd *Evius* and *Evan*, from the Word *ἔνωϊ*, which the mad Bacchæ or Bacchides us'd in their Orgies: Ovid. lib. 4. *Metam.* v. 15.

Nycteliusque Eleleusque Parens,
 & *Jacchus* & *Evan*.

793. The

Next roars the strong-lung'd SOUTHERN Blast, and
 The infant THUNDER on his dreadful Wings: (brings
 795 Then COLD pursues, the NORTH severely blows,
 And drives before it chilling FROSTS, and SNOWS:
 And next deep WINTER creeps, grey, wrinkled, old,
 His Teeth all shatter, Limbs all shake with Cold:
 Therefore no wonder sure the MOON should rise
 800 At certain Times, and that again she dies
 At certain Times; since thousand Things are shown
 At fixt and constant Times, and then alone.
 ECLIPSES may be solv'd a thousand ways;
 For if the MOON can stop descending RAYS
 805 By thrusting her DARK SELF between, and so
 Bring suddain SHADE, and NIGHT on all below;
 Then give me Reasons, why there can not be
 Another Thing, too DARK for us to see,
 And fit to stop the RAYS, as well as SHE?
 810 Or, why the circling SUN, in passing by
 Some venomous Places of the neighbouring Sky,
 May not grow SICK, and PALE, and almost DIE?
 Those past, grow well, regain his former LIGHT?
 Thus sometimes make us DAY, and sometimes NIGHT.
 815 And whilst the MOONS their monthly Courses run,
 Within the reach of EARTH's dark shadowing CONE,
 If

N O T E S.

793. The strong-lung'd southern Blast,] *Lucretius.*

Altitonans Vulturnus, & Auster fulmine pollens.

Vulturnus, of which Creech takes no Notice, is the South-East Wind, says Agell. lib. 2. cap. 22. Auster is the South Wind, and generally blows in Autumn.

803. Eclipses, &c.] In these 21. v. he treats of the Eclipses of the Sun and Moon: The Sun, says he, is eclips'd, when the Moon, or any opacous Body, below his Globe, interposes between that and the Earth, and thus intercepts his Beams, and hinders those Rays of Light from coming forward to the Earth.

The Moon is eclips'd, when she happens to be in the shadow of the Earth, or any other opacous Body, that is interpos'd between her Orb, and the Sun: Besides; why may not both the Sun and the Moon grow faint and sicken, nay, as it were, fall into a Swoon, when they chance to go thro' any Places of the Heavens, that are infectious to them, and destructive of their Fires and Light? This last was the Opinion of Xenophanes.

816. Within the reach, &c.] *Lucretius.*

Menstrua dum rigidas Coni perlabitur umbras.

That is to say, While the Moon, in her monthly Course, passes by

If then revengeful EARTH can stop the Light,
 If she can hide the sick'ning MOON in Night:
 Why can not other Things divert the Streams,
 820 The falling Streams of Light, and stop the Beams?

Or

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by the rigid Shadow of the Earth; which Shadow is of a Conick Figure. But some interpret Coni to be meant of the Earth itself, as if it were *κωνοειδής*, shap'd like a Cone, because Aristotle, lib. 2. Meteor. says, that the Earth is shap'd like a Tymbrel, and that the Lines drawn from its Centre make two Cones: but the Poet means the Lunar Eclipse is made, by reason of the Shadow of the Earth, that stretches out in the shape of a Cone.

818. The sick'ning Moon,] The antient Heathens were of Opinion, that Witches, by muttering some Charms in Verse, caus'd the Eclipses of the Moon; which they conceiv'd to be, when the Moon, the Goddess of the Earth, was brought down from her Sphere by the virtue of those Incantations: They believed likewise, that in these Eclipses, she sicken'd and labour'd, as in an Agony, and suffer'd a Kind of Death: Of this Belief were even Stesichorus and Pindar, as Pliny relates, lib. 2. cap. 12. Milton, tho' not of the same Opinion, yet describes this foolish Belief,

Not uglier follow the Night-Hag, when, call'd
 In secret, riding thro' the Air,
 she comes,
 Lur'd with the Smell of Infant Blood, to dance
 With Lapland Witches, while
 the lab'ring Moon
 Eclipses at their Charms. —

And Lee in the Tragedy of OEdipus, speaking of the Moon in Eclipse,

— The Silver Moon is all o'er
 Blood:
 A settling Crimson stains her
 beauteous Face:
 Sound there, sound all our Instruments of War;
 Clarions, and Trumpets, Silver,
 Brass, and Ir'n,
 And beat a thousand Drums to
 help her Labour.

The vain Heathens farther believ'd, That the Moon being by these Inchantments brought down from Heaven, they were at those times in danger of losing that celestial Light: and therefore they made a great Noise by beating of brass Vessels, by ringing of Bells, sounding of Trumpets, whooping, hallowing, and the like, to drown the Witches Mutterings, that the Moon not hearing them, they might be render'd ineffectual, and she suffer no hurt. Thus Medea in Ovid boasts that she could draw down the Moon from Heaven:

*Te quoque, Luna, traho, quam
 Temesæa labores
 Æra tuos minuant.* —

Metam. 7. v. 207.

And Tibullus.

*Cantus & è curru lunam diducere tentat,
 Et facerent, si non æra repulsa
 fonent.*

And Statius. 6. Theb.

— *Attonitis quoties divellitur
 astris
 Solis opaca foror, procul auxili-
 antia gentes
 Æra crepant.* —

And

Or if the Moon shines with a nat'ral Ray,
As thro' infectious AIR she cuts her way,
Why may not she grow sick, her Flames decay?

Since

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And Seneca in Hippolytus.

Et nuper rubuit, nullaue lucidis
Nubes fordidior vultibus obstitit:
At nos solliciti lumine turbido,
Tractam Thessalicis carminibus rati,
Tinnitus dedimus——

And Livy Decad. 7. 3. speaks of it, as of an ordinary Custom, in these Words: *Qualis in defectu Lunæ silenti nocte fieri solet, edidit clamorem.* And Juvenal says pleasantly enough of a loud scolding Woman, that she alone was able to relieve the Moon out of an Eclipse:

——Jam nemo tubas atque æra fatiget,
Una laboranti poterit succurrere Lunæ.
Sat. 6. v. 442.

And this absurd Superstition was so grounded in the Pagans, that after many of them were become Christians, it was not quite rooted out: not even in St. Ambrose's time, whose reprehension of this Piece of Paganism is cited by Turnebus in *Adversar.* And Maximus likewise blames it in a Homily de Defectu Lunæ. And Bonincontrius, who liv'd yet several Ages later, affirms, That he himself had seen this absurd Custom practis'd upon the like Occasion, by his own Countreymen, the Italians. The Turks continue it to this Day, as Scaliger affirms: And Plutarch in the Life of Æmilius reports,

That the Romans, besides their Beating of brazen Vessels, sounding of Trumpets, &c. were wont to reach up flaming Links and Torches towards Heaven, to resupply, and kindle again the Light of the Moon, which they believ'd by Charms to be extinguish'd. Delrius in Senec. Traged. says, he has read, that the Indians are wont with Tears and Lamentations to bewail this Defect or Deliquium of the Moon, believing the Sun had then whipt her till she bled, to which they impute the Cause of her dark and sanguine Colour. In Commentar. ad Hippolyt. pag. 195. Vide etiam Turnebum in *Adversar.* lib. 22. cap. 23. and 24. And Pincierus in *Parerg.* Otij Marpurg. lib. 2. cap. 37. Of this suppos'd fainting of the Moon Wowerus also makes mention in his *Pægnion de Umbrâ*, cap. 8. towards the End. But we may farther observe, that the Arabians believ'd the Moon to be in the like Agony, when she eclips'd the Sun, as appears by a Custom they observ'd at their new Moon. For keeping holy the Day of their Neomenia, or New-Moon, and believing it unlucky to have the Moon suffer any Hurt on that Day, they were wont, because she might on that day eclipse the Sun, the Solar Eclipse happening when the Moon is new, to defer the Celebration of their Neomenia till the next Day: or at least for sixteen Hours, till the Sun was past the Eclipse. And hence it is that the Astronomers distinguish the Neomenia of the Arabians, into the *Cœlestis*, which was the first and natural Time; and the *Civilis*, which was not the true time, but the

Since I've the MOTIONS taught of STARS above,
 825 How SUN, and MOON, and by what Cause they move;
 And how, ECLIPS'D, they lose their gawdy Light,
 And spread o'er all an unexpected Night,
 As if they wink'd, and then with open Eyes
 View'd all again, and clear'd the lower Skies:
 830 Now let's descend again to new-born EARTH,
 And find to what she gave the soonest Birth:
 What sort of Beings, which of all the Kinds
 She first durst venture to the faithless Winds.

SHE, first of all, green HERBS, and FLOW'RS did
 835 And spread a gawdy GREEN o'er all the Field: (yield,
 And

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the Day following, and on which they celebrated their Neomenia to avoid the ill Luck, and prosperous Accidents, which their Superstition made them apprehend. See Nicolaus Mulerius in his Diatribe de Anno Arabico, in the Explication of the Arabian Epochæ, or the Hegyra. Ubbo Emmius has inserted it in his Chronology between the fourth and fifth Books.

824. Since, &c.] Having explain'd after his manner the Motions of the Sun, Moon, and Stars, he descends from Heaven to his native Element, and in these 10. v. tells us that he is going to describe the Rise and Origine of Things from the Earth, the common Parent of all.

834. She first, &c.] Lucretius describes the Rise of things from the new-form'd Earth in so lively a manner, that he seems even to have been present at their Birth. And first in these 21. v. he tells us, that the Earth first produc'd the Grass, Herbs, and Flowers, then the Trees, then the less perfect, and last the most excellent Animals. For, says he, since we see, that even now, when the whole World is decay'd, and worn out to a great Degree, she still produces Mice, Frogs, and

other the like ignoble Animals, what may we not reasonably believe of her, when both herself and her Husband Æther, were in their blooming Age?

Here we may take notice that the Order, which Lucretius observes in the Creation of Things, differs very little from that, for which we have a better Authority than his: But let us hear a Christian Poet describe the same Thing.

—Then the Earth,
 Desert, and bare, unsightly, un-
 adorn'd,
 Brought forth the tender Grass,
 whose verdure clad
 Her universal Face with pleasant
 Green.

Then Herbs of ev'ry Leaf, that
 suddain flow'r'd,
 Op'ning their various Colours,
 and made gay
 Her Bosom smelling sweet: And
 these scarce blown,
 Forth flourish'd thick the clu-
 st'ring Vine, forth crept
 The smelling Gourd, upstood
 the corny Reed
 Embattel'd in her Field, and
 th' humble Shrub,
 And Bush, with frizzled Hair
 implicit: Last,
 Rose as in Dance the stately
 Trees, and spread

Their

And next the **TREE**, with spreading Branches, shoots,
 But closely fixt, and bound with steddy Roots.
 As **BRISTLES**, **HAIRS**, and **PLUMES** are first design'd
 O'er Limbs of **BEASTS**, and o'er the **WINGED KIND** ;
 840 So new-born **EARTH** with **HERBS** and **TREES** began,
 And then by various Ways bore **BEAST**, and **MAN** :
 For **HEAV'N**, 'tis certain, did not fashion all ;
 Then let the various **CREATURES** downwards fall :
 Nor **SEAS** produce an earthly Animal.
 845 And therefore Parent **EARTH** does justly bear
 The Name of **MOTHER**, since all rose from her :
SHE now bears Animals, when soft'ning **DEW** (new :
 Descends ; when **SUN** sends Heats, **SHE** bears a thousand
 Then who can wonder now, that then **SHE** bore
 850 Far stronger, bulky Animals, and more,
 When both were young, when both in Natures Pride ;
 A lustly **BRIDEGROOM HE**, and **SHE** a buxome **BRIDE** ?
 First, of all **ANIMALS**, in teeming **SPRING**,
 The **FEATHER'D KIND** peep'd forth, and clap'd their Wing :
 As

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Their Branches hung with copious Fruit, or gem'd
 Their Blossoms : With high Woods the Hills were crown'd,
 With Tufts the Valleys, and each Fountain-side,
 With Borders long the Rivers.—

847. She now, &c. Here the Poet proves by a Similitude, that all Animals did in the Beginning proceed from the Humidity of the Earth, warm'd and impregnated by the Heat of the Sun, in like manner as we now see Worms and Insects generated.

849. Then who, &c.] Lucretius foreseeing that it might be objected, that perfect and adult Animals do not now burst out of the Earth, intimates in this Place, that the Sun is now grown a disabled Lover, and the Earth past her teeming Time : and thus their Vigour being exhausted, they can not now produce Horses, Lions, &c. nor any of those large Animals, which they did

in the Beginning of the World, when they were both in the Prime, and Flower of their Age.

853, 854. First, &c.] In these 19. v. he says, That first of all Animals, and that too in the Spring, for that was the most proper Season, the Birds were hatch'd from Eggs, which, as Milton expresses it,

Bursting with kindly Rupture,
 forth disclos'd
 Their callow young : but feather'd soon, and fledge,
 They sum'd their Pens, and
 soaring th' Air sublime,
 With Clang despis'd the
 Ground : —

For, says our Poet, they had Growth and Strength sufficient to go in search of their Food ; Then from certain little Bags or Bladders, which he calls Wombs, and that stuck to the Earth, the other Animals, and

855 As even now our tender INSECTS strive
To break their Bags, get forth, and eat, and live,

Next

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Men themselves burst forth: while for their nourishment, a proper Liquor, very like Milk, flow'd from the Veins of Mother Earth into their infant Mouths: For we ought to believe, that the Earth, when she brought forth her young, had Milk no less than Women now a-days, when they bring forth their Children. Thus the Earth supply'd them with Food, the Temperature of the Air was such that they needed no Garments, and the Meadows, thick with Grass, afforded them easy Beds.

This first Manner of the Origine of Things Lucretius explains according to the Opinion of Animaxander, and of some others of the antient Philosophers, as we see in the first Book of Diodorus Siculus, near the beginning, where he says, That the Earth first stiffen'd and grew together, when the circumfus'd Fire of the Sun had enlighten'd, and warm'd it all around: Then, when, by reason of its being thus heated, the outmost Surface of it was in a manner fermented, some Humidities swell'd in many Places, and in them there grew certain slimy stinking Substances, involv'd in tenuous Membranes: the like to which may be seen to this Day in Fens and Marshes, where the Waters stagnate, when after cold Weather, the Air grows hot on a suddain, and is not chang'd by Degrees: Now those humid Things, which we mention'd before, being animated by the Heat, receiv'd Nourishment in the Night by the Mists that fell from above: but in the Day were con-

solidated and harden'd by the Heat. Lastly, When they that grew in the Wombs of the Earth, had attain'd their due Growth, the Membranes, being burst and broken to pieces, disclos'd the Forms and Shapes of all Kinds of Animals: And such of these as had the greatest Share of Heat, went to the higher Places, and became Birds: but such of them as had retain'd the earthly Solidity, were reckon'd in the rank of Reptiles, and other terrestrial Animals: And those that participated most of the Nature of Man, ran together to the Places, where human Kind assembled, and which was call'd the Place of their Birth. Thus far Diodorus.

854. The feather'd Kind, &c.] It is question'd by some, whether Birds, which are generally call'd Genus aëreum, and in the sacred Scripture it self, Volatilia Coeli, may be properly reckon'd among terrestrial Animals. Ovid, in his Distribution of Animals at the Creation, seems not to allow them to be so.

*Astra tenent coeleste solum, formæque Deorum,
Cesserunt nitidis habitandæ piscibus undæ.
Terra feras cepit, volucres agitalis Aër.* Metam. i. v. 73.

Cicero observes the like Disposition in the second Book of the Nature of the Gods, and in Timæus: so too does Aristotle, as he is cited by Plutarch in 5. de Placit. Philosoph. To these may be added the Belief of the antient Greeks, and which they

Next BEASTS, and thoughtful MAN receiv'd their Birth :
For then much vital Heat in Mother EARTH,

Much

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they had from the Egyptians, That Birds were produc'd before the Earth itself was form'd, to which Aristophanes in *Avibus* alludes. But Manilius more truly places them upon Earth: speaking of which he says,

Hanc circum variæ gentes hominum atque ferarum,
Aëriæque colunt volucres. —

lib. i. v. 236.

Apuleius agrees with Manilius, and ends the Controversy in these Words: *Si sedulo animadvertas, ipsæ quoque aves, terrestre animal, non aërium, perhibeantur: semper enim illis victus omnis in terrâ; ibidem pabulum, ibidem cubile, tantumque aëra proximum terræ volando verberant: iterum cum illis fessa sunt remigia alarum, terra ceu portus est.* That is, If you weigh the Matter aright, Birds may truly be affirm'd to be rather a terrestrial, than an aërial Animal, for they have all their Food from the Earth: there they feed, and there they rest: when on Wing, they indeed fan the Air that is next the Earth: but when their Wings grow weary, the Earth is their resting Place. But as to this Question see Hieron. Magius, lib. i. Miscellan. cap. ult. Jacobus Cruteus Syllog. 3. and Kircher in his *Iter. Ecstatic.* 2. Dialog. 2. cap. 5. I will only add, that another Difficulty, not much unlike the former, if either of them deserve to be call'd so, has puzzled the Brains of Aristotle, Theophrastus, and most of the antient Peripateticks, to wit, which were first created, Birds or Eggs, since neither an Egg can be produc'd without a Bird, nor

a Bird without an Egg: for so Censorinus proposes the Question; *Avesne ante, an ova generata sint, cum & ovum sine ave, & avis sine ovo gigni non possit? de die natali, cap. 14.* Disarius in Macrobius Saturnal. lib. 7. cap. 16. sums up the Arguments on both sides, and gives the Decision, of which the Reader may there be inform'd.

857. Next Beasts, &c.] Milton's description of the first Beasts rising out of the Ground at their Creation, is so lively and sublime, that it well deserves to be transcrib'd by way of Illustration, to this Passage of our Poet.

— The Earth obey'd, and,
straight
Op'ning her fertile Womb,
teem'd at a Birth
Innum'rous living Creatures,
perfect Forms,
Limb'd, and full grown: out of
the Ground up-rose,
As from his Lair, the wild Beast
where he wons
In Forest wild, in Thicket,
Brake, or Den:
Among the Trees in Pairs they
rose, they walk'd:
The Cattle in the Fields, and
Meadows green:
Those rare and solitary, these in
Flocks
Past'ring at once, and in broad
Herds up sprung
The grassy Clods now calv'd;
now half appear'd
The tawny Lion, pawing to get
free
His hinder Parts; then springs,
as broke from Bonds,
And rampant shakes his brinded
Mane: the Ounce,
The Libbard, and the Tygre, as
the Moal

Rising,

Rising, the crumbled Earth
about them threw
In Hillocks: the swift Stag from
under Ground
Bore up his branching Head:
scarce from his Mold
Behemoth, biggest born of Earth,
upheav'd
His Vastness: Fleec'd the Flocks,
and bleating rose,
As Plants: ambiguous between
Sea and Land,
The River Horse, and scaly Cro-
codile, &c. *Paradise lost. B. 7.*

Thoughtful Man, &c.] Lucretius in this Place speaks not after the Opinion of Epicurus only, but partly too of the Stoicks, who, as Lactantius witnesses, believ'd, *Homines in omnibus terris & agris tanquam Fungos esse generatos*: That Men were born, like Mushrooms in every Field: and partly after the Opinion of Animaxander, who, tho' he held that Men, and all the other Animals were produc'd of the Water, yet as Plutarch de Plac. Phil. l. 5. c. 19. says, he taught, that they were contain'd in thorny Bags, and shut up in them, till the Age of Puberty, and then bursting from those Prisons, they came out Men and Women, already able to nourish themselves: And lastly, partly after the Opinion of Archelaus, who in Lactantius, lib. 2. teaches, *homines ortos è terrâ, quæ limum similem lacti ad escam eliquaverit*, that Men were born of the Earth, which for their Nourishment ooz'd out a Slime like Milk. Others had yet other Opinions concerning the Original of Mankind: Juvenal Sat. 6. v. 11.

Quippe aliter tunc orbe novo,
cœloque recenti
Vivebant homines, qui rupto ro-
bore nati,
Compositique luto, nullos habu-
ère parentes.

In which Passage that Poet hints at two other Ways of the Creation of Man: the one from Trees, the other from the Earth. As to the first Britannicus says, *Quum primâ illâ ætate in speluncis sylvisq; more ferarum, habitarent, quumq; ex arboribus vetustate cavatis, tanquam ex domicilio exirent, putabantur ex arboribus esse nati*. Then alledging this Verse of Virgil, *Æneid. 8. 315.*

*Gensque virum truncis, & duro
robore nati,*

he shews in those Words the probable Cause of the Fiction: that as they dwelt in Woods, so they seem'd to be born of the Trees: but surely he forgets himself a little, when he says *ex arboribus vetustate cavatis*, having but just before said, *primâ illâ ætate*, for how then could the Trees have had time to decay and grow hollow? yet Autummus commits the same Oversight. The second way, mention'd by Juvenal of Man's Original, gives just Grounds to believe, that tho' many of the more learned among the Heathens had read the History of Moses, yet that they either despis'd, or corrupted, or oppos'd the Instruction: Witness Julian the Apostate, who in a Fragment of an Epistle publish'd with his other Works by Petavius, pag. 534. &c. seqq. delivers it as the Theology of the Ancient Heathens, that Mankind, increas'd not from two Persons, as Moses taught, but that when Jupiter created the World, Drops of sacred Blood fell down, out of which arose Mankind, *ὡς ὅτε Ζεὺς ἐκόσμη τὰ πάντα, σάμνων αἵματι ἱερῷ περασῶν, ἃ ὦν παρὰ τὸ τῶν ἀνθρώπων βλαστῶσαι γένος*. impiously urging, that otherwise the World could not have been so soon increas'd, though Women, as he
lewdly

Much moisture lay : And where fit Place was found,
 860 There Wombs were form'd, and fasten'd to the Ground :
 In these, the yet imperfect Embryo's lay,
 Thro' these, when grown Mature, they forc'd their way,
 Broke forth from Night, and saw the cheerful Day : }
 Then NATURE fashion'd for the Infant's Use
 865 Small BREASTS in Earth, and fill'd with MILKY JUICE :
 Such as in WOMEN's Breasts she now provides
 For future Infants : thither NATURE guides
 The chiefest Parts of Food, and there they meet
 Fit Ferment, there they grow both white and sweet :

EARTH

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lewdly adds, had been as fruitful as Swine. But what wonder is it, that Men had so mean an Opinion of their own Original, who believ'd but little better of that of their Gods ? Witness Varro. who in his Fragments, *Antiquitatum rerum divinarum*, blaming their fabulous Theology, Mythicon genus Theologiæ, says, in this we find, That one God is born out of the Head, another out of the Thigh, a third from drops of Blood : In hoc enim est, ut Deus alius ex capite, alius ex femore, alius ex guttis sanguinis natus. Nor were some of the antient Philosophers less ridiculous in their Opinions, concerning the Reparation of Mankind : To instance only in one : Every one knows, that there are in the Joints of the Fingers little Bones, commonly call'd Seed-Bones : one of which, about half as big as a Pea, is plac'd in the first Joint of the Thumb : This the Arabians call *Abadara*, as Bartholinus observes in his *Anatomical Institutions*, lib. 4. cap. ult. Now some of the wise Antients foolishly held, that out of that Bone, as out of Seed, Mankind should at last be propagated anew. You may find likewise other Opinions concerning Man's Original, in the learned Censorinus de *Die natali*, cap. 4. where he treats at

large of this Matter. And if you think it worth your while to see this fabulous Rife of the World confuted, you may find it well done by Firmianus, lib. 2. cap. 12.

860. There Wombs, &c.] Lactantius, lib. 2. de Origine Error. cap. 11. and 12. cites this Verse of Lucretius, and makes this Remark upon it. *Aiunt certis conversionibus coeli : & astrorum motibus maturitatem quandam extitisse animalium ferendorum : itaque terram novam semen genitale retinentem folliculos ex se quosdam in uterorum similitudinem protulisse, de quibus Lucretius, lib. 5.*

Crescebant uteri, terræ radicibus apti,

eosque, cum maturâssent, naturâ cogente, ruptos animalia cætera profudisse : Deinde terram ipsam humore quodam, qui esset lacti similis, exuberâsse, eoque alimento animantes esse nutritos. Thus too Cicero lib. 1. de Leg. & Censorinus de *die Natali*, cap. 2. where he tells us besides, that Democritus too was of the same Opinion.

Fasten'd to the Ground :] Lucret. *terræ radicibus apti : i. e. affix'd and sticking in the Earth, by their Roots.*

872. The

870 EARTH gave the Infants Food ; thin MISTS were spread
For CLOATHS ; the grassy MEADOWS gave a BED.

The EARTH, when new, produc'd no raging Cold,
No Heats, nor Storms : These grew, as she grew old.
Therefore our Parent EARTH deserves to bear
875 The Name of MOTHER, since ALL rose from HER.

Thus for a certain Time MANKIND she bore,
And BEASTS, that shake the Wood with dreadful Roar,
And various Kinds of Birds ; and as they flew,
The Sun, with curious Skill, the Figures drew
880 On all their Plumes : he well the Art might know,
He us'd to paint the like on his fair Bow.

But weary'd now, and tir'd by length of Time,
The EARTH grows old, and weak ; as WOMEN past
their Prime.

TIME changes all ; and as with swiftest Wings
885 HE passes forward on, HE quickly brings
A different Face, a different Sight of Things :

And

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872. The Earth, &c.] But how could these infant Animals bear the Inclemencies of the Seasons, the parching Heat, and the chilling Cold ; nay, how could they live, or even be born, when the Sun had bak'd the Earth, or the Cold frozen it up ? To this Lucretius answers in these 10. v. That in the beginning of the World there was neither Winter nor Summer ; but that the whole year was one calm and constant Spring. And certainly the Earth is justly styl'd a Mother by all the foregoing Ages, since she first brought forth Birds, Beasts, and then Man, as the Master-piece of all her Productions.

878. And as, &c.] This Part of this, and the three following Verses are added, with how much reason let the Reader judge, by our Interpreter to his Authour, who only says,

Aëriasque simul volucres varian-
tibu' formis.

882. But weary'd, &c.] But

why does she produce none of these Things now ? To this he answers in 12. v. that the Circumstance of Time is chang'd : and the Earth is now past her teeming age. And what wonder is it, that the World, being now grown cold and disabled, being sometimes tormented with too much Heat, sometimes persecuted with too much cold, and fallen into the other Inconveniences of long Life, is at length grown fruitless and barren ? Diodorus Siculus, lib. 1. says, That the Earth being continually bak'd by the Heat of the Sun, grew daily more and more constipated and bound up ; insomuch that she could not at length produce any more of the larger Kind of Animals, which were then generated by the mutual Commixtion of Animals of the same Species : To which Lucretius seems here to allude.

884. Time, &c.] To this purpose, Ovid Metam. lib. 15. v. 235. says finely :

Tempus

And NATURE alters: this grows weak, this strong,
 This dies, this, newly made, is firm and young:
 Thus alt'ring AGE leads on the World to FATE:
 890 The EARTH is diff'rent from her former State:
 And what in former Times with Ease She bore,
 Grown feeble now, and weak, She bears no more,
 And now does that She could not do before.

Besides: the EARTH produc'd a num'rous Train
 895 Of MONSTERS: Those her Labour wrought in vain:
 Some without Hands, or Feet, or Mouth, or Eyes;
 Some shapeless Lumps, NATURES Absurdities;
 Dull, moveless Things, and destitute of Food,
 Which could not fly the Bad, nor choose the Good.
 900 A thousand such in vain arose from Earth;
 For NATURE, frighted at the ugly Birth,
 Their Strength, and Life to narrow Bounds confin'd;
 Deny'd them Food, or to increase their Kind:
 For that one Pow'r a thousand Things requires;
 905 Almost as many as its own desires:
 There must be Food, and Seed, and Organs fit
 For flowing Seed, whilst all the happy Night
 The Body lies dissolv'd in soft delight;
 That MALE and FEMALE may their Pow'rs imploy,
 910 They must have Organs fit for mutual Joy.

But

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*Tempus edax rerum, tuque, in-
 vidiosa vetustas,
 Omnia destruitis: vitiataque
 dentibus ævi
 Paulatim lentâ consumitis om-
 nia morte.*

Thus render'd by Dryden.

Thy Teeth, devouring Time!
 thine, envious Age!
 On Things below still exercise
 your Rage:
 With venom'd Grinders you
 corrupt your Meat;
 And then, at ling'ring Meals,
 the Morsels eat.

894. Besides, &c.] The Poet
 here tells us in 38. v. That since
 Animals were at first fortuitous-
 ly born, 'tis reasonable to be-

lieve, that, in the beginning of
 the World, there were innumera-
 ble other Animals produc'd of
 wonderful Kinds and Sizes: but
 that they did not continue long,
 because they were imperfect, and
 wanted the means of receiving
 their Food, and the Power of
 Copulation, and engendering
 their Kinds. For all the Ani-
 mals now remaining are pre-
 serv'd, either by their own
 Power and Industry, or by the
 Care of Men: Thus the Lion is
 preserv'd by his Strength, the
 Fox by his Craft, the Stag by
 his Swiftneſs, &c. And those
 that are useful to Man, as Dogs,
 Cattle, Horses, &c. he takes
 care of and defends. But why
 should we nourish imperfect A-
 nimals, and such as would be of

- But more : these Years must num'rous Kinds deface ;
 They could not all preserve their feeble Race :
 For those we see remain, and bear their young,
 Craft, Strength, or Swiftneſs has preserv'd ſo long.
 915 Many their Profit, and their Uſe commends ;
 Thoſe Species Man preserves, kind Man defends.
 WILD BEASTS, and LIONS Race their native RAGE
 Preserves ſecure, thro' all devouring Age.
 SWIFTNESS preserves the DEER, and CRAFT the Fox,
 920 The vig'lant, faithful DOG, the HORSE, the OX,
 We Men defend ; we keep the tender Flocks :
 They ſhun wild Beaſts, they fly the dreadful Wood ;
 They ſeek for Peace, and much, and eaſy Food ;
 Gotten without their Toil : and this we give
 925 For the vaſt Profits we from them receive :
 But thoſe to whom their NATURE gave no Force,
 No Courage, Strength, nor Swiftneſs to the Courſe ;
 Whom neither Profit could, nor Uſe commend,
 Thoſe Man refus'd to feed, or to defend :
 930 Thus, doom'd by CHANCE, they liv'd an eaſy Prey
 To all, and thus their KINDS did ſoon decay.

But never CENTAURS ; theſe were never known ;
 That two ſuch NATURES ſhould combine in ONE,

Such

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no uſe to us ? Creech has omitted one Verſe in this Argument, where the Original has

Androgynum inter utrum, nec
 utrumq; & utrinque remotum :

And indeed it is generally held to be ſpurious : But whoever inſerted it, ſeems to have had an Eye on the Androgynos in the Banquet of Plato. Heinfius on the Phoenix of Claudian reads it thus :

Androgynen inter neutra, atque
 ab utroque remotam.

Androgynus is deriv'd from the Greek Words, *ἀνρ* a Man, and *γυνή*, a Woman, and ſignifies a Perſon who has both Sexes, the Male and Female : of which ſort the Poets ſabled Hermaphrodi-

tus, the Son of Venus and Mercury, to be : Cicero, lib. de Divin. calls an Hermaphrodite, *fatale quoddam Monſtrum* ; a certain fatal Monſter.

932. But never, &c.] He now teaches in 47. v. That Nature, tho' ſhe had neither Skill nor Experience, never brought forth ſuch monſtrous Animals, as thoſe, for which the Poets have moſt notoriously bely'd her. And firſt, ſays he in 14. v. Theſſalia never knew a Centaur : nor can a Man and a Horſe be conjoin'd in one Body : their different duration of Life, their Food, their Manners, all forbid it. We may ſay the like of Scyllas, and other Monſters of the ſame Nature : And they who believe the Exiſtence of a Chimæra, do not conſider that the Entrails of a Lion,

Lion, or any other Animal may be roasted, and consum'd by Fire. Whoever therefore holds, that miraculous and monstrous Animals could be produc'd by the Earth, while she was yet young, may likewise believe the Rivers of Milk and Gold, and the other idle Fictions of the Poets: But let him reflect too, that even at this Day many Seeds of Herbs and Trees are contain'd in the Bowels of the Earth, as were formerly the Principles of all things: yet Trees of several sorts never spring out of the Earth in one Tree, nor different Herbs from the Root of the same Plant.

Centaurs] Monsters, whose upper Part was like a Man, and their lower like a Horse: The Poets feign them to be begot by Ixion upon a Cloud: Thence Virgil calls them Nubigenæ, Cloud-begotten. They were indeed People of Thessaly, who liv'd near the Mountain Pelion, and were call'd Centaurs from *κεντήριον*, I spur, because they were the first who rid Horses with Spurs, and who fought on Horseback. Plin. lib. 7. cap. 56. Now when the ignorant Countrey-People in Thessalia saw Men first a Horseback, they imagin'd them and their Horses to be all of a piece, and this gave rise to the Fable. See B. IV. v. 733. Diodorus, lib. 5. Aristotle 2. Phys. 8. de Hist. Animal. & de generat. Anim. 4. & 5. cap. 3. deny and condemn all monstrous Mixtures of this Nature. And Ovid himself, that great Patron of all manner of Fables, even tho' he have given a Relation of a Battel between the Lapithæ and the Centaurs, yet upon better Thoughts seems to renounce that Credulity: when in Trist. lib. 4. Eleg. 7. he says,

— Credam prius ora
Medusæ
Gorgonis anguineis cincta fu-
isse comis,

Esse canes utero, sub Virginis :
esse Chimæram,
A truce quæ flammis separet
angue leam :
Quadrupedesque homines cum
pectore pectora junctos ;
Tergeminumque virum, ter-
geminumq; canem :
Sphyngaque & Harpyias, ser-
pentipedesque Gigantes :
Centimanumque Gygen, se-
mibovemque vitum.

Where he seems to deny not on-ly Centaurs, but also all manner of Monsters. Yet Empedocles held that there were such Crea- tures as Centaurs: and Claudius Cæsar likewise, witness Pliny, who writes, Hippocentaurum in Thessaliâ natum eodem die in- teriisse ; & nos principatu ejus allatum illi ex Ægypto in melle vidimus. A Hippocentaur was born in Thessalia, and dy'd the same Day : and I my self saw it, when by his Command it was brought to him in Honey out of Egypt. Voluterranus says, that he had seen a half-Dog : and o- thers other Monsters, of which Lycosthenes has made a Col- lection in his Book de Prodig. & Ostent. Sometimes Women have brought forth Frogs, Serpents, Stones, and the like, that had been generated in their Womb : Such Productions are indeed pre- ternatural, and the Effects of Disease ; but not therefore to be deem'd impossible, or reckon'd among the Number of Things that cannot be. Whether the forming Faculty submits and gives way to the Mother's Ima- gination, is not our Business in this place to inquire ; no more than it is to decide this Questi- on : Whether from the execra- ble and unnatural Copulation of a Man with a brute Beast, an Animal of a mixt and dubious Nature may not be generated. Herodotus writes, that in his Days a certain Woman us'd pub- lickly to couple with a Goat : And Pliny, lib. 7. cap. 3. wit- nesses,

Such disagreeing Pow'rs; absurd and vain!
 935 Plain Nonsense! These are CREATURES of the BRAIN.
 A Fool knows this: For HORSES oft enjoy
 Full growth at three Years old; not so a Boy
 He scarce forgets his Teat, and oft at rest,
 As Dreams present, he seeks his Nurses Breast:
 940 Then, when the HORSE grows old, his Limbs decay,
 And loosen'd Life begins to fly away;
 The Boy grows strong, he feels the Pride of Growth,
 A sturdy, vig'rous, gay, and bearded Youth:
 Left you should think such MONSTERS apt to grow,
 945 A thoughtful Man above, a HORSE below.
 Or SCYLLAS, whom a num'rous Train entwines
 Of HALF SEA-DOGS, and barks above her Loins:
 Or such that live, nor grow an equal Time,
 And which at equal Years not reach their Prime;

Whom

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nesses, that Alcippe brought forth
 an Elephant: and that another,
 in the beginning of the Marston
 War, was deliver'd of a Serpent.
 And the same Authour in the
 Place abovesaid, mentions se-
 veral other monst'rous Births.

935. Creatures of the Brain.]
 The Schoolmen call Centaurs,
 and the like imaginary Crea-
 tures, Entia Rationis; but they
 are rather Entia Imaginationis:
 Phantastick Creatures; that have
 no Existence, but in the Imagi-
 nation.

946. Scyllas,] There were two of
 this Name; one the Daughter of
 Nisus, the other of Glaucus, says
 Faber, and Creech after him, but
 they seem to be both mistaken,
 for she was Daughter of Phor-
 cus, with whom Glaucus was in
 Love. The Scylla of Nisus is
 said to have been chang'd into
 the Monster of that Name, whom
 we have describ'd, B. I. v. 740.
 and Book IV. v. 733. But Ovid
 Metam. lib. 8. v. 148. says she
 was chang'd into a Bird.

At aura cadentem
 Sustinuisse levis, ne tangeret
 aquora, visa est:

Pluma fuit: plumis in avem
 mutata vocatur
 Ciris, & a tonso est hoc nomen
 adepta capillo.

Milton in the second Book of
 Paradise Lost, describing Sin,
 whom he makes the Portress of
 Hell-Gate, had certainly an Eye
 on this fabulous Monster: His
 Words are these;

She seem'd a Woman to the
 Waste, and fair,
 But ended foul in many a scaly
 Fold,
 Voluminous and vast; a Serpent
 arm'd
 With mortal Sting: About her
 Middle round
 A Cry of Hell-Hounds never
 ceasing bark'd
 With wide Cerberian Mouths full
 loud, and rung
 A hideous Peal: yet, when they
 list, would creep,
 If ought disturb'd their Noise,
 into her Womb,
 And kennel there; yet there still
 bark'd, and howl'd,
 Within unseen: Far less abhor'd
 than her,

Vex'd

- 950 Whom equal Years not fill with youthful Rage,
 Nor lose their Strength again at equal Age ;
 Whom neither the same Kinds of Beauty fire,
 Nor raise soft Thoughts, gay Wishes, warm Desire ;
 Or those that seek, and live by, diff'rent Food :
 955 Thus HEMLOCK kills a Man, for GOATS 'tis good.
 Besides ; since FLAMES will scorch the LION's Breast,
 And burn, as well as any other Beast ;
 How could CHIMÆRAS rise, or how contain
 Three Kinds ; a LION's Head, a SERPENTS Train
 960 A GOAT, the middle of the fanſy'd Frame,
 And ſtill with ſcorching Noſtrils breathing FLAME ?
 Then he who thinks, that new-made HEAV'N and
 Did give to ſuch prodigious MONSTERS Birth, (EARTH
 Yet brings no Cause to prove the Fanſy true,
 965 But ſtill relies on the poor ſhift, 'T WAS NEW ;
 May fanſy too, that STREAMS enrich'd the SEAS,
 With golden Waves, that JEWELS grew on TREES :
 That MAN of ſuch vaſt Force and Limbs did riſe,
 That he could ſtride the OCEAN, whirl the SKIES ;
 970 Or any thing mad Fanſy can deviſe.

For

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Vex'd Scylla, bathing in the Sea,
 that parts
 Calabria from the hoarſe Tri-
 nacrian ſhore, &c.

and no doubt he took the De-
 ſcription from Homer,

Πρότε λεών, ἢ ὀπίοτε δ' ἐχέων.

955. Thus Hemlock, &c.] In
 like manner the Poet, Book IV.
 v. 646. ſpeaking of the Plant
 which he there calls veratrum, and
 which our Tranſlatour there calls
 Hemlock, as he does here the
 Plant which his Authour calls
 Cicuta,

See more in the Note on v. 650.
 B. II. To which I here add, that
 Bellerophontus, the Son of Glau-
 cus, King of Ephyra, is, there-
 fore ſaid to have kill'd this Mon-
 ſter, riding on the Sea-Horſe
 Pegasus, whom Neptune had lent
 him, becauſe he render'd habi-
 table a Mountain of the ſame
 Name in Lycia, whoſe Top,
 which was wont to throw out
 Flames, was full of Lions, the
 Foot of it ſtor'd with Serpents,
 and the ſides of it proper for the
 Paſtorage of Goats, Cteſias in
 Pliny ſays, that the Fire of that
 Mountain kindles with Water,
 and is extinguiſh'd with Earth,
 or with Hay.

Thus Hemlock-Juice pre-
 vails,
 And kills a Man, but fattens
 Goats and Quails.

968. That Man, &c.] Lucrer-
 tius, B. I. v. 239. has taught,
 why

See the Note on that Paſſage.

958. Chimæras] This ignivo-
 mous Monſter, that had the Head
 of a Lion, the Breſt of a Goat,
 and the Tail of a Serpent, the
 Poet himſelf ſufficiently explains:

For tho' much SEED lay hid, when thoughtful MAN
 And all the various KINDS of BEASTS began ;
 Yet nothing proves, that Things of DIFF'RENT Kind,
 That disagreeing NATURBS should be join'd ;
 975 Since now the GRASS, and TREES, and all that grows,
 And springs from EARTH, are never join'd like those :
 But each arising from its proper Cause
 Remains distinct, and follows NATURE's Laws.

Then Man was hard, as hard as Parent-Stones ;
 980 And built on bigger, and on firmer Bones : (strong :
 The NERVES, that join'd their LIMBS, were firm and
 Their LIFE was healthy, and their AGE was long :
 Returning YEARS still saw them in their PRIME ;
 They weary'd ev'n the WINGS of meas'ring TIME :
 985 No COLDS, nor HEATS, no strong DISEASES wait,
 And tell sad News of coming hasty FATE ;
 NATURE not yet grew weak, not yet began
 To shrink into an INCH, the larger SPAN :
 Like BEASTS they lay in ev'ry WOOD and CAVE,
 990 Gath'ring the easy FOOD, that NATURE gave :

No

NOTES.

why Nature could not at the Beginning create Men of so vast a size,

That while they wade through Seas, and swelling Tides,
 Th' aspiring Waves should hardly touch their Sides :

Why not so strong, that they with ease might tear

The hardest Rocks, and throw them through the Air ?

But because Things on certain Seeds depend

For their Beginning, &c.

979. Then Man, &c.] Here the Poet describes at large the State of Man, in the beginning of the World, their Manners and Way of Life : And first in 23. v. he teaches, that the first Men were stronger in Body, than Men now are, by reason of the innate Hardness they had inherited and contracted from their stubborn

Mother the Earth : whence they were less subject to Diseases, and much longer-liv'd : But no Man till'd the Ground, for all appear'd their hunger with Acorns, Wildings, and other Fruits like those. Next he tells us in 4. v. that the Springs and Rivers invited them by their Murmurs to come and quench their Thirst : Then in 11. v. That they had no Cloaths, nor Houses, but that Shrubs, and Woods, and Caves shelter'd them from Storms and Cold : And in 10. v. that they had no Laws, no Societies ; but liv'd by Spoil and Rapine : making use of the Women in Common, whom they either forc'd to submit to their Desires by Strength and Violence, or gain'd their Consent by Flattery and Presents, such as Acorns, Pears, and Apples.

As hard as Parent-Stones ;] Lucretius does no where say, that the

No impious PLOUGHMAN yet had learn'd to tear
 His PARENTS Bowels with the crooked share;
 None planted fruitful TREES, none dress'd the VINE,
 None prun'd decaying Boughs, none press'd the Wine:
 995 Contented they with the poor easy Store,
 That SUN and EARTH bestow'd, they wish'd no more:
 Soft ACORNS were their first and chiefest Food,

And

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the first Men ow'd their Origine to Stones; and our Translatour seems rather to allude to the fabulous Reparation of Mankind after the Deluge, from the Stones, which, by command of Themis, Deucalion and Pyrrha threw behind them: Of which Ovid Metam. lib. 1. v. 435.

*Inde genus durum sumus, experientisque laborum,
 Et documenta damus, quâ simus origine nati.*

991. No impious, &c.] This Passage of our Authour Ovid seems to imitate in his Description of the Golden Age:

*Ipsa quoque immunis, rastroque intacta, nec ullis
 Saucia vomeribus, per se dabat omnia Tellus:
 Contentique cibus, nullo cogente creatis,
 Arbuteos foetus, montanaque fraga legebant
 Cornaque, & in duris hærentia mora rubetis:
 Et quæ deciderant patulâ Jovis arbore glandes.*

The teeming Earth, yet guiltless of the Plough,
 And unprovok'd did fruitful Stores allow:
 Content with Food, which Nature freely bred,
 On Wildings, and on Strawberries they fed;

Cornels and Bramble-berries gave the rest;
 And falling Acorns furnish'd out a Feast.
 Dryden.

995. Contented, &c.] Macrobius, lib. 6. Saturnal. cap. 1. observes, that Virgil has imitated this Passage of Lucretius, when describing his happy Countreyman, he says,

*Quos rami fructus, quos ipsa volentia rura
 Sponte tulere suâ, carpsit.* —
 Georg. 2. v. 500.

He feeds on Fruits, which, of their own accord,
 The willing Ground, and laden Trees afford.
 Dryd.

997. Soft Acorns,] For the chief Food of the first Men was Acorns: Whence Virgil Georg. 1. v. 147.

*Prima Ceres ferro mortales vertere terram
 Instituit: cum jam glandes atque arbuta sacrae
 Deficerent sylvæ, & victum Dodona negaret.*

Where tho' the Poet says, that the Woods fail'd them, and no longer afforded them Acorns, yet it is more probable, that they contemn'd the use of Acorns, when they had discover'd the Art of sowing Corn: Thus Juvenal, speaking

And those red APPLES that adorn the Wood.

And make pale WINTER blush; such NATURE bore,
 1000 More num'rous then, besides a thousand more,
 Which all supply'd poor MAN with ample Store.

When THIRSTY, then did purling STREAMS invite
 To satisfy their eager Appetite:

As now, in MURMURS loud, the headlong FLOODS,
 1005 Invite the thirsty CREATURES of the Woods:

And then by Night they took their REST in CAVES,
 Where little STREAMS roul on with silent Waves;

They bubble thro' the Stones, and softly creep,
 As fearful to disturb the NYMPHS that sleep:

1010 The Moss, spread o'er the MARBLES, seems to weep:
 Whilst

NOTES.

speaking in the Person of the old
 Marfians and others, Sat. 14.
 v. 180.

— Panem quæramus aratro,
 Qui satis est mensis; laudant hoc
 numina ruris,
 Quorum ope & auxilio, grata
 post munus aristæ
 Contingunt homines veteris fa-
 stidia quercûs.

998. Red Apples, &c.] Lucr.

— Quæ nunc hiberno tem-
 pore cernis
 Arbuta Poeniceo fieri matura
 colore.

Arbutum is the Fruit of the
 Tree call'd Arbutus, the Arbut-
 Tree, a Plant frequent enough
 in Italy; it has the Leaves like
 those of a Bay-tree, but growing
 very thin, and bears a Fruit as
 big as a middling Plum, red like
 a Cherry, or rather Strawberry,
 because of its roughness, Pliny,
 lib. 15. cap. 24. calls the Fruit of
 this Tree, Poma inhonora,
 Apples of no value: and indeed
 tho' they have a certain Sweetness,
 they are sour withal, and un-
 pleasant to the Taste, as well as
 hurtful to the Head and Stomach.

The Antients delighted much in
 the Shade of this Tree. Horat.
 Nunc viridi membra sub arbuto
 stratus. Pliny calls the Fruit of
 this Tree Unedines, because, says
 he, we can not eat above one of
 them, by reason of their Asperi-
 ty and Sourness. But he is mi-
 staken in making the Unedo and
 the Arbutum to be one and the
 same Thing: The first of them
 is the Fruit of the Epimelis,
 which some interpret to be a sort
 of Medlar-Tree. But the Arbu-
 tum of the Latines, and which
 the Greek call Memæcylon, is
 the Fruit of the Tree, which the
 Latines know by the Name of
 Arbutus, and the Greeks by that
 of Comarus. Thus Galen, lib.
 2. Aliment. plainly distinguishes
 between the Unedo and the Ar-
 butum, ascribing the first to the
 Epimelis, the later to the Coma-
 rus, or Arbutus. Thus Dale-
 campus in lib. prim. Plin. argues
 that Authour of Errour.

1008. They bubble, &c.] Old-
 ham.

Hard by, a Stream did with
 such Softness creep,
 As't were by its own Murmurs
 hush'd asleep.

And

Whilst other STREAMS no narrow Bounds contain,
They break such Banks, and spread o'er all the Plain.

They knew no use of FIRE to dress their Food ;
No CLOATHS, but wander'd naked in the Wood :
1015 They liv'd to shady GROVES, and CAVES confin'd,
Meer shelter from the COLD, the HEAT, and WIND.

No fixt SOCIETY, no stedd' Laws ;
No publick Good was sought, no COMMON CAUSE,
But, all at War, each rang'd, and fought his Food,
1020 By NATURE taught to seek his private Good.

Then to renew frail MAN's decaying Race ;
Or mutual LUST did prompt them to embrace ;
Or else the greater VIGOUR of the MALE,
Or some few treach'rous PRESENTS did prevail ;
1025 Some ACORNS, APPLES some, some PEARS bestow ;
The THING the same, the PRICE was less than now.

Then strong, and swift, they did the BEASTS pursue ;
Their ARMS were STONES, and CLUBS ; and some they
And some they fled : from those they fear'd to fight (slew.
1030 They ran, and ow'd their SAFETY to their FLIGHT.

When

NOTES.

And the Authour of Hudibras,
Close by a softly murm'ring
Stream,
Where Lovers us'd to loll and
dream.

1009. The Nymphs that Sleep:]
For the Nymphs were fabled to
dwell in Caves and Dens. Of
them see Book 4. v. 589.

1014. No Cloaths,] *Lucr.*

——— *Neque uti
Pellibus, & corpus spoliis vestire
ferarum :*

For, as the Poet will teach by
and by, the first Coverings Men
wore, were the Skins of wild
Beasts, they kill'd in hunting.

1026. The Thing, &c.] This
Observation is the Translatour's,
not his Authour's, who, I be-

lieve, would scarce have said so.
The Presents Lucretius mentions,
were of the greatest Value in
those Days : therefore the Price
was not less than now.

1027. Then strong, &c.] These
robust unpolish'd Mortals spent
all their time in hunting wild
Beasts, whom they pursu'd with
Stones, Clubs, and such like
Weapons : And when they were
either weary of killing them, or
that Night came on, they roul'd
themselves up in Leaves and
Grass, and slept contented, and
with a quiet Mind ; for they did
not dread, what the Stoicks
foolishly believ'd of them,
when Night had involv'd the
World in Shade, that Light and
Day would never return, because
they had observ'd that Vicissitude
from the first beginning of Day
and Night : This is contain'd in
15. v. In the 31. v. following the
Poet goes on. But, says he, this

A a a a

Life

When drowsy NIGHT came on, they naked lay,
 Spread o'er the GROUND like BEARS, and rough as they :
 Their SLEEP was sound, they wak'd not all the Night,
 Nor wander'd here and there, whilst SHADES affright,
 1035 Nor view'd the EAST with longing Eyes for Light : }
 But all dissolv'd in sweetest SLUMBERS lay,
 Till the bright SUN arose, and brought the DAY.
 For since they had beheld, e'er since their Birth,
 The DAY and NIGHT by Turns spread o'er the Earth ;
 1040 They never fear'd the SUN should lose his LIGHT,
 And all lie bury'd in eternal NIGHT.

The

NOTES.

Life of theirs was vex'd with some
 Inquietudes : the wild Beasts
 surpriz'd them, when they were
 sleeping : and then a sudden
 Death was their Portion ; or a
 tedious and painful Life, by
 means of their festering Wounds :
 for they knew not yet the heal-
 ing Virtue of Simples : Famine
 kill'd many, and more the ve-
 nomous Herbs they ignorantly
 fed on. But that none may think,
 that all Mankind was, by so ma-
 ny Ills and Mischiefs as befel
 them, involv'd in one common
 Ruin, and totally destroy'd ; let
 it be consider'd, that the wild
 Beasts devour'd them only one by
 one, and that few dy'd by poi-
 sonous Herbs, or for want of
 Food, in comparison of the ma-
 ny Thousands that fall in a Day
 in our Armies : Besides ; what
 Numbers are now swallow'd up
 in the Sea ; how many dy by
 Poyson, how many by Intempe-
 rance and Luxury ?

1036. But all, &c.] Manilius
 is of another Opinion, lib. 1.
 v. 66. where speaking of the first
 Inventours of Arts, he says :

Nam rudis ante illos, nullo dis-
 crimine vita

In speciem conversa operum ra-
 tione carebat,

Et stupefacta novo pendebat lu-
 mine mundi :

Tum velut amissis moerens, tum
 læta renatis

Syderibus, variosque dies, incer-
 taque noctis

Tempora, nec similes umbras
 jam sole regresso,

Jam propiore, suis poterat dis-
 cernere causas.

Before that Time Life was an
 artless State,

Of Reason void, and thoughtless
 in Debate :

Nature lay hid in deepest Night
 below ;

None knew her Wonders, and
 none car'd to know :

Upward Men look'd, they saw the
 circling Light,

Pleas'd with the Fires, and won-
 der'd at the Sight :

The Sun, when Night came on,
 withdrawn they griev'd,

As dead ; and joy'd next Morn,
 when he reviv'd :

But why the Nights grew long
 or short ; the Day

Is chang'd, and the Shades vary
 with the Ray,

Shorter at his Approach, and lon-
 ger grown

At his Remove, the Causes were
 unknown. Creech.

And with Manilius agrees Stati-
 us, Thebaid. 4. where speaking
 of the primitive Arcadians, he
 says,

Hi

The most they dreaded was the furious BEAST ;
 For he, in Dead of Night, did oft molest,
 And lengthen into DEATH, their slumb'ring REST.
 1045 Sometimes they left their Caves by Night, and fled,
 Rows'd from their softest SLEEP, all pale, half dead,
 While BOARS and LIONS came, and seiz'd their Bed.
 Yet fewer dy'd than now : for singly then
 Each caught within the Limits of his Den,
 1050 While the BEAST tore the living, trembling FOOD,
 And revel'd in full Draughts of reeking BLOOD,
 With dreadful Cries he fill'd each WOOD and CAVE,
 To see his LIMBS go down a LIVING GRAVE.
 Others, that scap'd with Life, but wounded, groan'd,
 1055 Holding their Hands on the corrupting Wound,
 While trembling ECHO's did restore the Sound.

Not

N O T E S.

Hi lucis stupuisse vices, noctisque
 feruntur
 Nubila, & occiduum longè Ti-
 tana secuti
 Desperâsse diem. —

And Dracontius in Hexaëmer.

Nec lucem remeare putat terrena
 propago ;
 Ast ubi purpureum surgentem ex
 æquore cernunt
 Luciferum, vibrare jubar, flam-
 masque ciere,
 Et reducem super astra diem de
 sole rubentem ;
 Mox revocata fœvent hesternâ in
 gaudia mentes,
 Temporis & requiem noscentes
 luce diurnâ
 Cœperunt sperare diem, ridere
 tenebras.

And the learned Selden, de Diis
 Syris, Syntagm. 2. confirms their
 Opinions, and believes the Ori-
 ginal of the Festivals, which the
 Antients instituted in Honour of
 Adonis, to have sprung from no
 other Ground : His Words are
 these. Non aliud cogitârunt ;
 qui primum has nænias institue-
 runt, quam solis accessum & re-
 cessum : Quem ut amissum nunc

lugebant, & renatum lætis exci-
 piebant auspiciis. Ita rudiores
 olim, & qui simpliciorum vitam
 degebant, prius quam ab Astro-
 nomis leges syderum didicerant.

1053. A living Grave.] Lucre-
 tius.

Viva videns vivo sepeliri viscera
 busto :

Upon which Faber observes, that
 Dionysius Longinus blames an
 Expression like this, in Gorgias
 Leontinus, who calls Vulturs,
 the living Sepulchres of Men,
 ζύπτες ἐμψυχοὶ τάφοι. However
 he excuses Lucretius, though he
 condemns not the Censure of
 Longinus : For, says he, Gorgias
 was a Rhetorician, in whose Art
 such Descriptions ought never to
 find Place, tho' in Poetry they
 have much of the Sublime.

1056. While trembling, &c.]
 This Verse is the Translatours,
 not the Poets.

1057. Not skill'd, &c.] Lucre-
 tius.

Expertes opis, ignaros, quid vul-
 nera vellent.

i. e. They knew not yet the Art
 A a a a 2 of

Not skill'd in HERBS, and now grown desperate,
 With horrid Cries they call'd on ling'ring FATE,
 Till WORMS increas'd, and, eating thro' the CLAY,
 1060 Made Passage for the SOUL to fly away.

But then no ARMIES fell at once, no PLAIN
 Grew red, no RIVERS swell'd with Thousands slain :
 None plough'd the FLOODS, none shipwreck'd made their
 Graves

In Seas, none drank COLD DEATH among the Waves,
 1065 But oft the furious OCEAN rag'd in vain ;
 No mischief done, the WAVES grew mild again :

No

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of Medicine, and were ignorant
 of the Remedies, requisite to heal
 their Wounds.

1059. Till Worms, &c.] This
 and the following Verse run thus
 in the Original.

*Donicum eos vitâ privârunt ver-
 mina sæva.*

Festus says, That Vermina signi-
 fies, the wringing of the Guts,
 when we feel a Pain, as if Worms
 were gnawing them : The Greeks
 call it *σέρψος*. But perhaps Ver-
 mina may here signify very
 Worms, that might be engende-
 red in their rankling and corrupt-
 ing Wounds : if so, our Transla-
 tour is so far in the right ; but
 how well their making a Passage
 for the Soul to fly away, agrees
 with the Doctrine of Epicurus,
 the Reader need not be inform-
 ed.

1061. No Armies fell] They
 had yet no Wars ; but were
 wholly ignorant of the cruel Arts
 of destroying one another : And
 as Ovid says, *Metam. l. v. 97.*

*Nondum præcipites cingebant
 oppida fossæ :*

*Non tuba directi, non æris cor-
 nua flexi,*

Non galeæ, non ensis, erant :
sine militis usu

*Mollia securæ peragebant otia
 gentes.*

No Walls were yet, nor Fence,
 nor Moat, nor Mound ;
 Nor Drum was heard, nor
 Trumpets angry Sound :
 Nor Swords were forg'd : But,
 void of Care and Crime,
 The soft Creation slept away
 their Time.

1063. None, &c.] Thus too
Ovid Metam. l. v. 94.

*Nondum cæsa suis, peregrinum
 ut viseret orbem,
 Montibus, in liquidas pinus de-
 scenderat undas :
 Nullaque mortales, præter sua
 littora nôrant.*

The Mountain Trees in distant
 Prospect please,
 Ere yet the Pine descended to
 the Seas ;
 Ere Sails were spread new
 Oceans to explore,
 And happy Mortals, uncon-
 cern'd for more,
 Confin'd their Wishes to their
 native Shore.

And Manilius, lib. i. v. 76.

*Immotusque novos pontus sub-
 duxerat orbés :*

*Nec vitam pelago, nec ventis
 credere vota*

*Audebant, sed quisque satis se
 nosse putabat.*

None

No SHIPS were found, nor could the treach'rous Smile
Of smooth-fac'd WAVES tempt one poor Man to Toil.

Then WANT, now SURFEITS bring a hasty DEATH;
1070 Our BELLIES swell so much, they stop our BREATH.

Then POYS'NOUS HERBS, when pluck'd by Chance, did
Now POYSON's grown an ART, improv'd by Skill. (kill;
But when they built their HUTTS, when FIRE began,
Any

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— None resign'd
Their Lives to Seas, or Wishes
to the Wind;
Confin'd their search; they knew
themselves alone,
And thought that only worthy to
be known.

1068. Tempt one poor Man to
Toil.] For as Seneca in Medea
says,

Audax nimium qui freta primus
Rate tam fragili perfida rupit;
Terrasque suas post terga videre,
Animam levibus credidit austris,
&c.

Which the Tragedian took from
Horace, Od. 1. 3.

Illi robur & æs triplex
Circa pectus erat, qui fragilem
truci
Commisit pelago ratem
Primus; nec timuit præcipi-
tem Africum, &c.

Thus render'd by Dryden,

Sure he, who first the Passage
try'd,
In harden'd Oak his Heart
did hide,
And Ribs of Iron arm'd his
Side:

Or his at least, in hollow Wood,
Who tempted first the briny
Flood:

Nor fear'd the Winds contend-
ing Roar,
Nor Billows beating on the
Shore;

Nor Hyades, portending Rain,
Nor all the Tyrants of the Main;

What Form of Death could him
affright,
Who, unconcern'd, with steadfast
Sight,
Could view the Surges, mountain
steep,
And Monsters, rousing in the
Deep?

Could through the Ranks of
Ruin go,
With Storms above, and Rocks
below?

In vain did Nature's wise Com-
mand

Divide the Waters from the
Land,

If daring Ships, and Men pro-
phane

Invade th' inviolable Main;

Th' eternal Fences overleap,

And pass at Will the boundless
Deep.

No Toil, no Hardships can re-
strain

Ambitious Man, inur'd to
Pain;

The more confin'd, the more he
tries,

And at forbidden Quarry flies.

1069. Then Want, &c.] Penu-
ria cibi: Want of Food. The
next Verse, Our Bellies, &c. is a
Thought of our Translatours,
not of his Authours.

1073. But when, &c.] We have
hitherto seen only Men, who
were wild and savage, who wan-
der'd in the Woods, and liv'd
by Spoil and Rapine: But others
now enter upon the Stage, who
are mild, gentle, and studious of
civil

And SKINS of murder'd Beasts gave CLOATHS to MAN :
 1075 When ONE to ONE confin'd, in chaste Embrace,
 Enjoy'd sweet LOVE, and saw a num'rous Race :
 Then MAN grew soft, the TEMPER of his MIND
 Was chang'd from rough to mild, from fierce to kind :
 For us'd to FIRE, his Limbs refus'd to bear
 1080 The piercing Sharpness of the open Air ;
 And LUST enfeebled him ; besides, the CHILD,
 Soften'd by PARENTS Love, grew tame and mild.
 Then NEIGHBOURS, by degrees familiar grown,
 Made LEAGUES, and BONDS, and each secur'd his own :
 And

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civil Life. For by this Time, says the Poet in 20. v. that Temperature and Calmness of the Air, which reign'd when the World was in its Infancy, remain'd no longer ; but sometimes piercing Cold, and sometimes scorching Heat, together with Storms and Tempests, persecuted Mankind. Those Hardships and Inconveniencies weaken'd them by degrees, and forc'd them to the Contrivance of building themselves Huts and Houses, to shelter their Bodies from the Inclemencies of the Seasons : They dwelt in these new Abodes, one Man confin'd to one Woman, and were bless'd with a numerous Offspring, whose infant smiling Innocence soften'd the rigid Sourness of their Parents Temper, and chang'd their innate sullen Roughness into Calmness and Affability. After this, having found out the use of Fire, they became so tender, that, unable to endure any longer their primitive Nakedness, they made themselves Cloaths of the Skins of Beasts ; and grew so civiliz'd in time, that they enter'd into Friendships and Societies, in so much that they, who were desirous to be safe themselves, found it their best way to abstain from doing Injuries to others : Thus Concord preserv'd Mankind.

1074. And Skins, &c.] Dio-

dorus Siculus, lib. 1. says, that the Poets feign'd Hercules to be cloath'd with the Skins of Beasts, and that he is painted too in that Garb, to put Posterity in Mind of this antient way of Dress of our first Fathers.

1081. Besides, the Child, &c.] Lucret.

— Puerique parentum
 Blanditiis facile ingenium fregere
 superbum.

i. e. The Children, by their harmless innocent Smiles, easily soften'd the Roughness of their Parents Temper. This Passage can have no other Interpretation, tho' Creech makes it say quite the contrary.

1083. Then Neighbours, &c.] They who endeavour to disgrace Religion, usually represent it as a Trick of State, and as a politick Invention to keep the Credulous in Awe ; which however absurd and frivolous, yet is a strong Argument against the Atheist, who cannot declare his Opinions, unless he be a Rebel, and a Disturber of the Commonwealth : The Cause of God, and his Caesar are the same, and no Affront can be offered to one, but it reflects on both ; and that the Epicurean Principles are pernicious to Societies, is evident from the Account they give of the Rise of them.

1085 And then by SIGNS, and broken Words agreed,
That they would keep, preserve, defend, and feed
Defenseless INFANTS, and the WOMEN too,
As nat'ral PITY prompted them to do.

Tho'

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them. First then we must imagine Men springing out of the Earth, as from the teeth of Cadmus his Dragon, (*fratres fungorum, & tuberum*, as Bias call'd the Athenians, who counted it a great glory to be *Ἀυλόχθονες*;) and like those too, fierce, and cruel; but being softned by natural Decay, and length of Time, grew mild; and weary of continual Wars, made Leagues, and Combinations, for mutual Defence and Security; and invested some Person with Power to overlook each Man's Actions, and to punish, or reward those that broke or kept their Promises. Now if Societies began thus, 'tis evident that they are founded on Interest alone, and therefore Self-preservation is the only thing that obliges Subjects to Duty; and when they are strong enough to live without the Protection of their Prince, all the bonds to Obedience are cancell'd, and Mutiny and Rebellion will necessarily break forth; for we all know, how ambitious every Man is of Rule, how passionately he desires it, and how eagerly he follows it, tho' ten thousand Difficulties attend the Pursuit: What if he break his Promise, recall his former Consent, and act against the Law that was founded on it? Why need he be concerned, if he has got the longest Sword, and is above the Fear of Punishment? Will not a prospect of a certain Profit lead him on to Villany? And why should his Conscience startle at Wickedness, that is attended with Pleasure? Since all the Epicurean Vertues are nothing but Fear, and Interest, and

the former is remov'd, and the latter invites. 'Tis true, as Lucretius says, strange Discoveries have been made, and Plutarch gives us very memorable Instances: Plots have been defeated, but as many prov'd successful: and how weak that single Pretence, how insufficient to secure Government, is evident from the daily Plots, and Contrivances, Murders, and Treasons, that disturb us; tho' all the Terrours of Religion joyn with these Fears, and endeavour to suppress them. And therefore these Opinions are dangerous, and destructive of Societies, and, as Origen says of his Purgatory Fires, *ἐκ ἀκίνδων ὃ τῶν τοιούτων σαφήνεια πιστεῦσαι γεαφῆ, ἅτε τῶν πομπῶν ἐχρηζόντων πλείονος διδασκαλίας ὡς τιμῶν ἢ καὶ τῶν ἀμαρτανόλων κολάσεως εἰς ᾧ τὰ ὑπέρβεια αὐτῆς ἐχρήσιμον ἀναβαίνειν διατὰ τὰς μόγας φόβῳ αἰωνίᾳ κολάσεως καὶ συζέμονίᾳ ἐπὶ πόσον ἢ κακίας, ἢ τῶν ἀπ' αὐτῆς ἀμαρτανόλων χύσιν.* Others, tho' pretending to better Principles than those of Epicurus, yet are altogether as faulty in stating the Rise of Power; and more absurd: for his Opinion is agreeable to his other Positions, but theirs contradict the Creation they assert, and the Providence they allow; I mean those that declare the People to be the Spring and Fountain of Power, and that from their Consent all the Authority of the Governour is derived: Sure these Men never considered the Relation betwixt God and his Creatures; and what an absolute Domi-

Tho' this fix'd not an UNIVERSAL PEACE,
1090 Yet many kept their FAITH, and liv'd at Ease ;

Or

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Dominion he has over those, to whom he first gave, and still continues, Being. But let us look on Man under that Circumstance, and then how naked, how divested of all Power will he appear ? How unable to dispose of himself, and submit to the Laws of his Fellow free Agent ? Unless he endeavours, as much as is possible, to disown the Right of the Deity, and turns Rebel against the Authour of his Being. For how can any one submit himself to another, without the express Permission of him that has absolute Dominion over him ? And where is that Permission ? Is it founded on Reason or Scripture ? Does Benevolence, or Self-preservation, the two proposed Motives to Society, speak any such thing ? And does not Scripture expressly oppose this Opinion ? Well then, all Power descends from above ; 'tis the Gift of that Being, to whom it principally belongs, and *ἐκ τε Διὸς βασιλῆες*, Kings are from God, is true, both in the account of the sober Heathen, and good Christian : and therefore every King, that ever was, or is, whether he obtain the Crown by Succession, or Election, (except the Jewish) must be acknowledged absolute: Liberty and Property of the Subjects depend on his Will, and his Pleasure is Law ; for none can confine or limit that Power which God bestows, but himself : And therefore to prescribe Laws to the Governour, to choose or refuse him on certain conditions, is to invade the Prerogative of Heaven, and rebel against the Almighty. Thus when God design'd to limit the Power of the Jewish Monarchy,

he prescribes Laws himself ; but since he hath not fixt any to other Princes, every King, as such, (for I do not respect their particular Grants to the People, which they are bound to observe) is absolute.

To free this from all Exception, it must be considered that the Discourse is concerning the Origine of Power, which is now settled in some Persons, and by which Communities are governed. The Epicureans act very agreeably to their impious Principles, when they make Fear and Distrust the only Motives to Agreement, and the Pacts which the scatter'd Multitude agreed to be the Foundation of the Power of the Prince : it being impossible for them, who had excluded Providence, to find any other Original : But this Opinion, as deliver'd by them, depending upon their other absurd and impious Philosophy, must be weak and irrational ; yet still this Notion is embrac'd, tho' not upon the same Motives ; Faction and Ambition propagate that Errour, which was nothing else but innocent Ignorance in the Antients : They considered Man as single, unable to live with Security or Comfort, because his Fellows, either out of Pride, Lust, or Covetousness, would endeavour to rob him of his Enjoyments, and his Life too, if it hinder'd them in the Prosecution of their Wishes ; Thus they saw a Necessity of Government, and because it proceeded from Man's natural Imperfections, they thought him, that by his Wisdom, or his Strength, was most fitted for the Defence and Preservation of others, to be as it were a Lord

Or else, almost as soon as it began,
The RACE had fall'n, this AGE ne'er seen a MAN.

Kind

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a Lord by nature, and born a
Sovereign : Thus Plutarch, *ὁ
πρῶτος ἢ κυριώτατος νόμος πᾶσι
σώζειν δεικνύει τὸ σῶζειν δυνά-
μενον ἀρχοῦν καὶ φύσιν ἐποδίδωσι.*

'Tis the first and most funda-
mental Law, that He that is
able to protect, is a King by
Nature to him that needs Pro-
tection : Thus Historians make
the Election of the first Kings to
be for their Strength, their Wis-
dom, or their Beauty : and Ari-
stotle peremptorily determines,
that the Barbarians are Slaves by
Nature to the Greeks : This was
innocent enough in them, but
how can we be excused, who
have such perfect Knowledge of
a Creation, who hear Wisdom
proclaim, that by her Kings
reign, who made it an Article
in Edward the VIth's Time, and
now every Day in our publick
Prayers profess, that God is the
only Ruler of Princes ? From
whence 'tis necessarily inferr'd,
that he only bestows the Power,
for if it came from the Multi-
tude, what is more evident, than
that they could make what Con-
ditions they pleased, subject them
to a High Court of Justice, and
call them to account, if they
act contrary to their Pleasure ? It
being certain, and confirmed by
common Practice, that he that
voluntarily parts from his Right,
may do it on what Terms he
thinks fit : Now if it be certain,
(and Demonstration proves it) that
God is the alone Giver of Power.
if the Prince be, as Plutarch
and Menander say, *εἰκὼν ἐμψυ-
χος θεῶν*, a living Image of the
Deity, if, as Pliny, *qui vice Dei
erga hominum genus fungeretur*,
and every King, whether Elective

or Successive, rules by the same
Authority, as 'tis certain they
do, because both have Power, and
the People can give them none ;
then what is more certain, than
that all Kings, which way soever
they are introned, before they
have made any Grants to their
People, are absolute ? And that
their Pleasure is Law, for other-
wise there could be none, that
Liberty and Property depend up-
on their Will.

Nam propriæ telluris herum
neq; me, neq; illum,
Nec quenquam statuit Natu-
ra —

Nor does Nature provide more
Privileges for one than another :
And if the Principles are true,
and the Inference naturally fol-
lows, as it does, because the Peo-
ple, that cannot bestow the Pow-
er, have no Right to make Condi-
tions for its Exercise, and set Li-
mits how far it shall extend, and
make such and such Agreements
for the Admission of the Prince ;
what Harm is there in this inno-
cent Truth ? For we discourse
only of Kings as they first are,
without any Reference to such and
such particular Communities,
where they have been pleased to
limit themselves ; to grant Privi-
leges to their Subjects, and settle
Property, and confirmed all this
with Oaths, and engaged their
Royal Word, and Promise before
God and Man for their Perform-
ance.

I suppose it is granted on all
hands, that the King is Supreme,
that upon any Pretence whatso-
ever it is Treason to resist ; and
so there can be no Fear of Punish-
ment, no Tye upon the King but

B b b b

his

Kind NATURE Pow'r of framing SOUNDS affords
 To Man ; and then CONVENIENCE taught us WORDS :
 1095 As INFANTS now, for WANT of WORDS, devise
 Expressive SIGNS : they speak with HANDS and EYES ;
 Their speaking Hand the WANT of WORDS supplies.

All

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his own Conscience ; sufficit quod Deum expectet ultorem ; yet tho' the Law cannot punish, it can direct : tho' it is not a Master, it is a Guide, and such a one, as, because of his Oath, he is bound to follow : For tho' the People can not, He can limit himself ; for being a rational Creature, and intrusted with Power, without any particular Rules for the Guidance of it ; his Reason is to be his Director, and therefore according to the Tempers and particular Humours of the People, he may make Laws, settle Maxims of Government ; and oblige himself to make those his Measures, because his Reason assures him, that this is the best Method for the Preservation of the Society, the Maintenance of Peace, and obtaining those Ends, for which he was intrusted with this Power.

And since Princes must dye, and Government being necessary, Succession is equally so, and therefore it may seem that every Prince, owing his Power only to the same Original from which the first derived it, is at liberty to confirm such and such Privileges and Immunities, which his Predecessors have granted ; yet upon a serious View of the premised Reason, no such Consequence will follow ; for since the Predecessors have found these Laws agreeable to the tempers of the People, and the only way to preserve Peace, 'tis evident that those are rational, and since he is to use his Power according to right reason, there is an antecedent Obligation on him to assent to those Laws ; and make those the Measures of his Go-

vernment ; unless some extraordinary Case intervenes, which requires an Alteration of those Laws, and then that method of abrogating old, and making new ones is to be followed, which constant Experience hath found rational : And since a Prince cannot be bound by any Tyes but those of Conscience, this Opinion leaves all the Obligations possible upon him.

1093. Kind Nature, &c.] But it may reasonably be ask'd, how Leagues could be made, and Societies establish'd among Men, who perhaps indeed could think, but had not yet learnt to utter their Thoughts. To this Lucretius answers, That the first Men were conscious to themselves of their own Powers and natural Faculties ; and that they utter'd several Sounds, as each Object that they saw, or as any thing that they felt, caus'd in them either Fear, Joy, Pain, Grief, Pleasure, &c : For Nature herself compell'd them to this ; and therefore Horses, Dogs, Birds, in short, all Animals, that have Breath, do the like : And thus Man too at first stammer'd only imperfect and inarticulate Sounds. But no Commerce was yet establish'd, they had no mutual Communication with one another : Nor indeed could any such Thing be, till Names were given to Things : Every Man therefore perceiv'd, that it would be useful to himself and others, to agree upon a certain Name for each Thing. Thus all, who were enter'd into one Society, agreed among themselves upon the same Names.

All know their Powr's; they are by NATURE shown:
 Thus tender CALVES with naked Front will run,
 1100 And fiercely push before their HORNS are grown.
 Young LIONS shew their Teeth, prepare their Paws;
 The BEARS young CUBS unsheath their crooked
 Claws,
 While yet their Nails are young, and soft their Jaws.
 The BIRDS strait use their Wings, on them rely;
 1105 And soon as Dangers press, they strive to fly.

Besides; That ONE the NAMES OF THINGS contriv'd,
 And that from him their Knowledge all deriv'd,

'Tis

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Names of Things: And thus the usefulness of calling Things by Names, gave occasion for the Invention of Words. But for any to pretend, that one Man gave Names to all Things, is wretchedly absurd and foolish. This Disputation Lucretius has included in 63. v.

Scaliger, in the first Book of his Poetick, chap. i. observes, That as all our Actions, so Speech too is to be consider'd under three different Heads: I. As absolutely necessary: II. As useful: III. As delightful. The first Kind was that which serv'd as a necessary Means of Inter-course between Man and Man, barely to understand one another's Meaning: And such we may imagine to have been that manner of Speech, which Lactantius de vero Cultu cap. 10. mentions, and which Men, according to the Opinion of some of the Antients, us'd in the beginning of the World, when, as some believ'd, they only gesticulated their Thoughts, and spoke their Meaning by Signs and Nods. After which, as the same Author says, and before him Diodorus Siculus, lib. i. they made Essays of Language, by imposing distinct nominal Notes, or Names upon several Things, and

thus by Degrees they made a kind of Speech. Thus too Horat. lib. 1. Serm. 3.

*Quum prorepserunt primis animalia terris,
 Mutum & turpe pecus,
 Donec verba, quibus voces sensusque notarent,
 Nominaque invenêre.*

The second sort of Speech, says Scaliger, was a little more refin'd and polish'd, by being adapted and made fit for Use, and Convenience; and by applying, as it were, certain Dimensions, Prescriptions, and Lineaments to the first rude Sketch of Language; whence proceeded a certain Law and Rule of speaking: The third sort was yet more polite, there having been added to the former the Ornament of Elegancy, as its Dress and Apparel. Thus Scaliger, of Speech in general.

[1106. Besides, &c.] Here Lucretius seems to fall foul upon the Chronologer of the Holy Scripture, by denying that Names were given to Things by the first Man: but those Writings were perhaps unknown to our Poet, and he chiefly disputes against the Opinions of Pythagoras and Plato; Man, says Iamblichus

'Tis fond to think : For how could that MAN tell
The NAMES OF THINGS, or lisp a Syllable,
1110 And not ANOTHER MAN do so as well?

Nay

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blichus de Sect. Pythagor. was created the most wise and knowing of all Animals, capable to consider things, and to acquire Knowledge from them ; because God had imprinted and bestow'd upon him the plenitude of all Reason, in which are contain'd all the several Species of Things, and the Significations of all their Names, and of all Words : Plato in Cratylus will not allow, that any one Man gave Names to Things, but that they receiv'd their Names from the wisest and most learned of Men, whom he calls *ὀνομαστές*, and *ὀνομαζόμενοι*, the Makers and Imposers of Names, in the giving of which, says he, the highest Wisdom manifestly appears ; and Cratylus adds, that no Man could do it, but they, who reflecting on the Nature of Things, were able to judge of them, and to accommodate, and give to each Thing a Name, suitable to, and expressive of, its Nature : Lucretius was aware of this, and therefore inquires in these 4. v. How this great Knowledge came to be in the first Nomenclator, and deny'd to the rest of Mankind : How should one Man, says he, be able to give Names to Things, and not another ? The Answer is ready, tho' it will appear of no Weight to Lucretius, who will not believe the Creation of one Man only from whom all the rest have descended ; nor, that when Names were first given to Things, there was yet but one Man in the World : And why might not that first Parent of Mankind, whom

God had infus'd with Knowledge, (*Creavit Deus scientiam in animo, sensu implevit eum, & mala & bona ostendit illi, addiditq; disciplinam. Eccles. cap. 17.*) Why might he not, I say, being thus instructed, impose Names on Things ? And that too then especially, when this new created Monarch, on the Festival of his Inauguration, call'd all his subject Animals by their Names : *appellavitque Adam nominibus suis cuncta animalia* ; says the sacred Chronologer, *Genes. 3.* Which Text of holy Writ Eusebius, *Preparat. Evangel. lib. 11. cap. 4.* reciting, says, that Moses meant nothing else by it, than that a Name was given to each Thing, agreeable and suitable to its Nature. And since the Nature of Man is prone to learn, and greedy of Knowledge, why might not the rest of Men, who came afterwards into the World, and convers'd with that first Giver of Names, willingly retain them in their Memory, as they receiv'd them from him ? From him, I say, who, not like mute Animals, could express only his own Affections, his own Desires ; but likewise knew and express'd the Nature and Manners of others. But of the Original of human Speech, see *Laërt. lib. 10. Diodor. Sicul. lib. 1. sub initium, & Plato in his Cratylus.*

1110. And not, &c.] That is to say, If any one Man could impose Names on Things, another might, at the same time, do the same Thing.

1111. Nay

Nay more : If OTHERS us'd not WORDS as soon,
 How was their USE, and how the PROFIT known ?
 Or how could HE instruct ANOTHERS Mind ?
 How make them understand what was design'd ?
 1115 For his, being single, neither Force, nor Wit
 Could conquer MANY MEN, nor they submit
 To learn HIS WORDS, and practise what was fit.
 How he perswade those so unfit to hear ?
 Or how could savage they with Patience bear
 1120 Strange SOUNDS and WORDS still rattling in their EAR.
 But now since ORGANS fit, since VOICE and TONGUE,
 By NATURES Gift bestow'd, to MAN belong,

What

NOTES.

1111. Nay more, &c.] In these
 10. v. the Poet asks ; How that
 first Nomenclator could com-
 pel the rest of Men to learn from
 him what they were to say ; and
 to retain in their Memory the
 Words he had invented, and the
 Names he had given to things ?
 This Argument is of little vali-
 dity : For, besides, as we said be-
 fore, that the Nature of Man is
 prone to learn, and desirous of
 Knowledge, we know that Chil-
 dren easily accustom themselves
 to pronounce and speak by de-
 grees the Words they hear spoken
 by their Parents, Nurses, and
 others that are about them : The
 Child, who had been brought up
 by Goats, and never in his Life
 heard a human Voice, bleated like
 that Animal, and spoke only the
 Language of Goats. Even Par-
 rots, Pies, Starlings, &c. when
 they are taught, learn to pro-
 nounce human Words articulate-
 ly, meerly by their own Industry ;
 and we observe them, conning o-
 ver by themselves, and softly mut-
 tering the Lessons that have been
 taught them : Plutarch de Animal.
 Compar. makes mention of a
 Magpie he had seen in a Barber's
 Shop at Rome, that sung no less
 than nine different Tunes, obser-
 ving the due Time and Measure

in all of them. What Wonder
 then that Man, a Creature en-
 dow'd with Reason and Under-
 standing, should learn to imitate
 the Words of his Fellow-Crea-
 ture ?

1121. But now, &c.] Here the
 Poet in 35. v. says, That 'tis
 not surprizing, that any Man,
 to whom Nature had given a
 Tongue and a Voice, could, as
 he thought fit, and according to
 the various Knowledge he had
 conceived of the great Variety
 of Things, distinguish and mark
 each of them by a proper Name ;
 especially since even mute Ani-
 mals can, and do express their
 different Passions and Affections,
 by different Voices and Sounds ;
 For they declare and signifie their
 Pain and Pleasure, and the other
 Affections, that are subject to
 those two, by inarticulate indeed,
 but unlike and various, Sounds.
 Why then might not any Man
 mark and denote different
 Things by different Names ? But
 this is not what was done by the
 first Imposer of Names ? For he
 not only express'd his own Affe-
 ctions ; but the proper Nature,
 and genuine Manners of others,
 by virtue of the divine Gift, the
 Knowledge which the Almighty
 had infused into him.

1123. What

What Wonder is it then, that MAN should frame,
 And give each DIFFERENT THING a DIFFERENT NAME?
 1125 Since BEASTS themselves do make a diff'rent Noise,
 Oppress'd by Pains and Fears, or fill'd with Joys.
 This plain Examples shew: When DOGS begin
 To bend their Backs, and shew their Teeth, and grin,
 When hollow Murmurs shew deep Rage within;
 1130 Their VOICE is diff'rent when they bark aloud,
 And with strong Roarings fright the trembling Croud:
 Or when they lick their WHELPS with tender Tongue,
 Or when they play, and wanton with their Young,
 Now seem to bite, but never chop their Jaws,
 1135 Now spurning, but with tender fearful Claws;
 Then flatt'ring, soft and tender is their VOICE
 Far diff'rent from that grating, howling Noise,

They

NOTES.

1123. What Wonder, &c.] For, as Faber on this Passage observes, if the Names themselves gave any Knowledge, τῶν φύσεων, of the Natures and Qualities of the Things that are call'd by them, and if upon the bare Pronunciation of three or four Syllables any particular Notice were obtain'd; that indeed would deservedly claim our Admiration: but since it depends only upon Use, and that Use upon Chance, Convenience, and sometimes on the Temerity and Ignorance of the meaner and illiterate Part of Mankind, Lucretius is in the right to say, that there is no wonder in it.

1125. Since Beasts, &c.] Sextus Empiricus, lib. 11. Pyrrhon. Hypotyp. seems to be of Opinion, That Birds, and brute Beasts have a particular Language according to their different Kinds: and with him agrees Lactantius, and says, That Speech is proper to Man; and yet we may observe in Birds and Beasts a certain similitude of Speech, and that too, different upon different Occasions: To us indeed their Voices seem imperfect and inarticulate; and so too per-

haps do ours to them: but their Voices utter Words to themselves, because they understand them. Proprius homini sermo est; tamen & illis quædam similitudo sermonis: Nam & discernunt invicem se vocibus; & cum irascuntur, edunt sonum jurgio similem: & cum se ex intervallo videre, gratulandi officium voce declarant: Nobis quidem voces eorum videntur inconditæ, sicut illis fortasse nostræ: sed illis, qui se intelligunt, verba sunt. Lactan. de Ira Dei. cap. 7. And the credulous Antients firmly believ'd, that Magicians understood the Languages of Birds: And Porphyry assures us, That Apollonius Tyanæus could expound the Notes of Swallows; or, as Philostratus says, the Chirping of Sparrows: Tiresias likewise is renown'd for his Knowledge in the Languages of Birds: Apollon. Rhodig. lib. 3. mentions one Mopsus, who understood the Languages of Crows and Daws. Pliny lib. 10. cap. 49. relates of Melampus, that he was instructed to interpret the Tongues of Birds by a Serpent, that came to him, and lick'd

They make, when shut alone, or creeping low,
Whine, as they strive to shun the coming Blow.

1140 The HORSE with diff'rent Noises fills the Air,
When hot and young, he NEIGHS upon his MARE,
Rous'd by strong LOVE; or when by fierce Alarms,
He SNORTS, and bears his Rider on to ARMS.

Thus BIRDS, as HAWKS, or those that cut the Flood,
1145 Make diff'rent Noises as they eat their Food;
Or when they fiercely fight; or when pursue
The trembling Prey: Each PASSION has a new:

Sometimes at CHANGE of AIR, they change their Voice;
Thus DAWS, and om'nous CROWS, with various Noise,
Affright

NOTES.

lick'd his Ears. But of this even he himself seems to question the Truth: nor does he give much Credit to what he reports of Democritus, who said, That the Blood of several Birds, mixt together and corrupted, will produce a Serpent, of which whoever eats, intellecturus sit avium colloquia, will understand the Discourse of Birds: That the Southsayers drew their Divinations from the Voices of Birds, as well as from their Flight, is notorious: Virgil *Æn.* 3. v. 359.

Trojugena, interpres Divûm, qui numina Phœbi,
Qui tripodas, Clarii lauros, qui sydera sentis,
Et volucrum linguas, & præpetis omina pennæ:

And the Birds, from whose Voice they took their Auguries, were call'd, Oscines, from, os & cano, singing with the Mouth: and these were Crows, Ravens, Pies, and the like: as the others, from whose flight they divin'd future Events, were call'd Præpetes, from, *πρὸς πέτεσθαι*, flying before, as Vultures, Eagles, &c. But besides all this, we may produce the Authority of some of the Jewish Doctors, who affirm Salomon to have been learned in

the Languages of Birds: Nay, they say, that he sent a Message by a certain Bird, to the Queen of Æthiopia; who must therefore be thought to have been as knowing in the Language of Birds as himself: And in the Alcoran, he is made to say, O homines, intelligite avium eloquentiam: And from the same Authority we learn, That a Lapwing, or a Bird call'd a Houp, brought him the first News of the Queen of Sheba: Of which Notice is taken in the Prolegom. in Bibl. Polyglott. But Delrius denies, That either Birds or Beasts can use Discourse, because they are void of Reason; yet he confesses, that they have certain Indications, or expressive Sounds, by which they reveal and make known their Affections and Appetites; and which Men, by long Observation, may come to understand: He adds, that these Indications of theirs are perfectly known to the Devil, and that he may instruct Magicians to know them as well as himself; which whether he ever did or not, says he, I cannot tell: but, non est incredibile fecisse, it is not incredible but he has. Delrius *Disquis. Mag. lib. 2. cap. 19.*

1149. Ominous Crows] Crows are said to prognosticate the Change

1150 Affright the Farmers; and fill all the Plain,
 Now calling for rough WINDS, and now for RAIN.
 Therefore since BEASTS and BIRDS, tho' dumb, com-
 As various VOICES, as their various SENSE; (mence
 How easy was it then for MAN to frame,
 1155 And give each different THING a different NAME?
 Now for the Rise of FIRE: swift THUNDER thrown
 From broken sulph'rous CLOUDS, first brought it down:
 For

NOTES.

Change of Weather, either to fair or foul: and to give notice of each by their different Croaking: If they croak often, and with a hoarse Voice, it is a Sign of Rain: Virg. Georg. 1: v. 381.

— Et è pastu decedens
 agmine magno

Corvorum increpuit densis exercitus alis.

And v. 388.

Tum cornix raucâ pluviâ vocat improba voce,

Et sola in ficcâ secum spatatur arenâ.

But if they croak not above three or four times, and with a shrill and clear Voice, it betokens fair Weather. Thus Virgil in the same Georgick, v. 410. speaking of fair Weather, says, that

Tum liquidas corvi presso terguttare voces

Aut quater ingeminant: & sæpe cubilibus altis

Nescio quâ præter solitum dulcedine læti

Inter se foliis strepitant: juvat imbribus actis

Progeniem parvam, dulcesque revifere nidos.

See the Note on v. 89. B. VI.

1156. Now for, &c.] He has

before made mention of Fire: v. 1073. He now teaches in 15. v. That Fire was either thrown down to Earth by Thunder: or that the Trees, being rudely shaken by stormy Winds, and their Branches growing hot by frequent striking and dashing against one another, burst out at length into Flames, and first gave Fire to Men, who us'd it to dress their Meat, having observ'd that the Heat of the Sun ripen'd and brought their Fruits to Maturity, and made them more fit for their Service. And thus another Way of Life, and Change of Food, invented by witty Luxury, was first introduc'd.

Caneparius, de Atramentis, cap. 13. reckons up six several Ways, by which Fire may be generated and kindled; viz. Propagatione, Putredine, Coitione, Antispasi, Frictione & Percussione: by Propagation, Corruption, Coition, Antispasis, or contrary Revulsion, Friction, and Percussion: which nevertheless he reduces to these three Kinds, Propagation, Coition, and Motion; in which the other ways are included: For Corruption and Revulsion to the contrary kindle Fire, by compelling the dispersed Heat to unite together, and therefore fall under the Head of Coition: as Friction and Percussion do under that of Motion.

1160. And

For many Things take Fire, when LIGHT'NING flies,
And sulph'rous Vapours fill the lower Skies:

1160 And TREES, when shaken by a Southern Blast,
Grow warm, then hot, and so take Fire at last;
Their Branches, mingling with a rude Embrace,
Burst into FLAMES.—

And thus our FIRES might rise from either Cause.

1165 The SUN first taught them to PREPARE THEIR MEAT;
Because they had observ'd his quick'ning Heat,
Spread o'er the Hills, and ev'ry shady Wood,
Ripen'd the Fruits, and made them fit for Food.

Hence various Methods they did still pursue,

1170 And chang'd their former Life, to take a new.

The

NOTES.

1160. And Trees, &c.] This, if we may believe some Authours, happen'd often formerly in Hungary: And Lucretius has already made mention of Trees taking Fire by Collision, Book I. v. 902. See the Note on that Place: Moreover, Vitruvius, lib. 2. cap. 1. ascribes the Original of our culinary Fire to this Accident of Trees taking Fire in a Tempest: His Words are as follow: Ab Tempestatibus & Ventis densæ crebritatibus arbores agitatae, & inter se terentes ramos, ignem excitaverunt: Which the Antients having observ'd, took from thence the first Hint of the Invention of their Igniaria: for their way of getting Fire was by rubbing one Stick against another, till being heated, they catch'd Fire, which they fed with dry Leaves, or some other Matter, that was easily combustible: Virgil Æn. 1. v. 179.

Suscepitque ignem foliis, atque
arida circum
Nutrimenta dedit.—

And these dry Nourishments, says Turnebus, in his Notes on Theophrastus de Igne, they call'd *ἱσδαῖα*, i. e. focus: or, accord-

ing to the Scholiast of Apollonius, *σπορεύς*, i. e. Strator: Which we may compare with our Tinder: The other Parts, which were the Sticks, they call'd *τέρετρον*, i. e. Terebrum, and these serv'd instead of our Flint and Steel. The Trees, that are most subject to take Fire in this manner, are said to be the Fig-tree, Laurel, Oak, Holm, Tile-tree, Ivy and Vine: but above all the Laurel. And if we may give credit to Manilius, Fire may be got almost out of every Thing.

Sunt autem cunctis permixti partibus ignes;

Qui gravidas habitant fabricantes fulmina nubes;

Et penetrant terras, Ætnamque imitantur Olympo,

Et calidas reddunt ipsis in fontibus undas:

Ac silice in durâ, viridique in cortice sedem

Inveniunt, cum sylva sibi collisa crematur,

Ignibus usque adeo Natura est omnis abundans. lib. 1. v. 850.

Which our Translatour thus renders:

The Wiser, and the WITTIER left the Field ;
And Towns for safety did begin to build ;
By Nature, KINGS. —————

Then CATTLE too was shar'd, and steady BOUNDS
1175 Mark'd out to ev'ry Man his proper Grounds :
Each had his proper Share, each what was fit,
According to his BEAUTY, STRENGTH, or WIT :
For BEAUTY then and STRENGTH had most Command ;
Those had the greatest Share in Beasts and Land ;
But

NOTES.

Fire lies in ev'ry Thing ; in
Clouds it forms
The frightful Thunder, and de-
scends in Storms :
It passes thro' the Earth, in Ætna
raves,
And imitates Heav'n's Thunder
in its Caves :
In hollow Vales it boils the rising
Floods ;
In Flints 'tis found, and lodges
in the Woods ;
For, toss'd by Storms, the Trees
in Flames expire,
So warm are Natures Parts, so
fill'd with Fire.

Creech.

1171. The Wiser, &c.] In these
30. v. he tells us, That to pro-
vide the better for their common
safety, they gave the Sovereign
Power to one Man, to whom Na-
ture had given to excel in Beauty,
Wit, or Strength ; and had thus
herself declar'd him a King. This
Monarch fell to building of
Towns and Towers, to defend
himself and his Subjects from the
Insults of their Enemies. He
governed them at Will ; every
Thing was done that he com-
manded, and,

O Happy Mankind under such
a Prince !

But Avarice and Ambition soon
corrupted and overthrew all
things : And such is the Condi-
tion of Princes, ev'n at this Day,

That whosoever values his ease
and quiet, and desires to live hap-
pily, will, if he be wise, avoid
the Administration of publick
Affairs: For the Sovereign Au-
thority is hard to gain, and
harder to keep: Instead of Plea-
sures, it brings Cares and Trou-
bles; It is always tottering and
inconstant; always attack'd by
Ambition and Envy, and often
thrown down by Conspiracy.

1174. Steady Bounds, &c.]
Thus too Ovid. Metam. i. v.
135.

*Communemque prius, ceu lu-
mina solis & auras,
Cautus humum longo signavit
limitē mensor.*

Then Land-marks limited to
each his Right,
For all before was common as the
Light. Dryd.

1178. For Beauty, &c.] It
was the Custom formerly in ma-
ny Countries to choose their
Kings for the Beauty and Ma-
jesty of their Persons: This
Aristotle, lib. i. de Rep. reports
to be true of the Ethiopians; who,
says he, when they observe any
one, who, in his Looks, resem-
bles the Images of their Gods,
immediately conclude, that he
was born to rule over others.
And Xenophon in Symp. says,
That Beauty is something that
Nature herself has stamp'd with
Royalty.

1180 But when once GOLD was found, the pow'rful Ore
Saw Light, and Men gap'd after glitt'ring Store;
Then WIT and BEAUTY were esteem'd no more,
But WEALTH enjoy'd their Honour, seiz'd their Place:
The WISE and BEAUTEOUS bow to FORTUNE'S ASS.

1185 But if MEN would live up to REASONS RULES,
They would not scrape and cringe to wealthy Fools:

For

NOTES.

Royalty. Heliogabalus, though but a Boy, was chosen Emperor by the Roman Soldiers at first sight of him; as if he had had what Euripides calls *Εἰδὼ δ' ἔτιον τρεφνίδω*, a Countenance that deserv'd a Kingdom. Thus Dryden:

—— Manly Majesty
Sate in his Front, and darted
from his Eyes,
Commanding all he view'd.——

And in another Place:

Eyes that confess'd him born for
Kingly sway;
So fierce they flash'd intolerable
Day.

And Virgil seems to have had something like this in his Thoughts, when he describes the difference of Look between the lawful King of the Bees, and the Usurper; of which Description that this Note may not stretch too long, I will omit the Original, and give only Dryden's Translation:

With Ease distinguish'd is the
regal Race:
One Monarch wears an open, ho-
nest Face,
Shap'd to his Size, and God-
like to behold,
His royal Body shines with Specks
of Gold,

And ruddy Scales: For Empire
he design'd,
Is better born, and of a nobler
Kind:
That other looks like Nature
in Disgrace:
Gaunt are his Sides, and fullen
is his Face,
And like this grievously Prince
appears his gloomy Race.

To which I will only add, that *θεοεινελω*, like a God, is often us'd by Homer as an Epithet for a beautiful Person.
Strength had most Command]
For as Varro Margop. says very well:

*Qui pote plus viget, pisces ut
sape minutos
Magnu' comest; ut aves enecat
accipiter.*

1183. But Wealth, &c.] Thus Horace, Sat.

—— Omnis enim res,
Virtus, fama, decus, divina, hu-
manaque pulchris
Divitiis parent, &c. ——

And Ovid:

*Aurea sunt verè nunc sæcula;
plurimus auro
Venit honos.——*

And the Authour of Hudibras
in two Words,

For 'tis the greatest WEALTH TO LIVE CONTENT
 WITH LITTLE : such the greatest Joy resent :
 And bounteous FORTUNE still affords Supply,
 1190 Sufficient for a thrifty LUXURY.
 But WEALTH and POW'R Men often strive to gain,
 As that could bring them Ease ; or make a Chain
 To fix unsteady FORTUNE : all in vain !
 For often when they climb the tedious Way,
 1195 And now in reach of Top, where HONOURS lay ;
 Quick Strokes from ENVY, or from THUNDER thrown,
 Tumble the bold, aspiring Wretches down :
 They find a GRAVE, who strove to reach a CROWN.
 And thus 'tis better, than proud SCEPTRES sway,
 1200 To live a quiet SUBJECT, and obey.

These

NOTES.

For Money is the only Pow'r,
 That all Mankind falls down be-
 fore.

1187. For 'tis, &c.] Who, that reads these Lines, can believe that Epicurus was an Epicure : He believed that a wise Man can not be poor : because he lives content with what he has ; and thinks it enough, even tho' it be but little : He plac'd indeed the chief Happinesses of Life in Pleasure : and what he meant by Pleasure let Cicero teach us : Negat Epicurus jucundè posse vivi, nisi cum virtute vivatur : negat ullam in sapientem vim esse Fortunæ : tenuem victum antefert copioso, &c. Tuscul. Quæst. lib. 3. And Laërtius tells us, that Epicurus was often inculcating into his Hearers, Parsimony, Contineny, Sparingness of Food, and Equanimity, or Easiness, and Content of Mind in all States and Conditions : Whence he had often in his Mouth this Saying, ἡδιστὰ πολυτελείας ἀπολαύειν ὁ ἱκανοὶ ταύτης δεόμενοι.

The greatest Wealth to live content] Thus too Dryden in the Wife of Bath's Tale after Chaucer ;

Content is Wealth, the Riches of the Mind,
 And happy he, who can that Treasure find :

But the base Miser starves amidst his Store,
 Broods on his Gold, and gripping still at more,
 Sits sadly pining, and believes he's poor.

1190. Sufficient, &c.] *Ventre nihil novi frugalius*, says Juvenal; Sat. 5. v. 6. And it was the constant Observation of the soberer Heathens, That Nature is content with very little : Diogenes in the Life of Socrates, relates of that Philosopher, that he was wont to say, That most Men seem'd to live only to eat ; but that for his Part he eat only to live. And Plato observes, That of all Creatures Man is longest in digesting his Food : And that Nature has order'd it thus to intimate to us, That she would not have those nobler Occupations, of which she has render'd us capable, and for which we were chiefly created, to be interrupted by too frequent eating.

And

These former **KINGS** now murther'd, they o'erthrown,
 The Glory of the Sceptre and the Crown
 Decreas'd: The **DIADEM**, that Sign of State,
 Now wept in Drops of Blood, the **WEARER'S** Fate;
 1205 Spurn'd by the common Feet; who fear'd no more:
 'TIS SWEET to spurn the Things we fear'd before.
 Thus **MONARCHY** was lost.

That **SUN** once set, a Thousand little **STARS**
 Gave a dim Light to **JEALOUSIES** and **WARS**:
 1210 While **EACH** among the **MANY** sought the **THRONE**,
 And thought no Head, like his, deserv'd the **CROWN**.

This

NOTES.

And as this is a good moral Reason, so neither is the Physical Reason, which Anatomists give us, to be contemn'd: For they observe, That the Ileon, one of the Guts, through which the Meat must pass, and so call'd from εἰλέω, I involve, is six times longer than our whole Body, and twisted and folded in such a manner, and withal so small, that what we eat can not pass through it easily, and in a short time.

1203. Diadem] Diadems were us'd by the antient Kings, as Crowns are now, for the Mark of Royalty: They are by some said to be only white Ribbands, adorn'd with precious Stones, and which they bound about their Heads. The Word comes from ἀγδέν, to bind about. But Pancirollus, from an Epistle of St. Jerome to Fabiola, describes a Diadem to be a little Cap, like half a Football, bound about with a white Fascia or Wreath. This Passage of St. Jerome is in Epist. 128. de vestitu Sacerdotum, where that Father calls it rotundum Pileolum, a round Cap; such a one as that in which Ulysses is represented in an arch'd Walk, call'd by his Name. The Greeks, says he, call it τιάρα, and some, galerus: after which he adds, that this

Pileolum was ty'd on to the back-part of the Head with a Ribband, in such a manner, that it could not easily slip off: Ita in occipitio vitta constructa est, ut non facile labatur ex capite. Yet indeed the Fascia or Vitta itself seems rather than the Bonnet to have been the Diadem: For Marcellinus, lib. 15. acquaints us, that Pompey was suspected of Treason, for wearing the fasciola candida about his Leg, to hide, as he pretended, a Sore: but, says he, the Fasciola candida being generally interpreted a Diadem, it created a Suspicion, that he was aiming at the Empire: the rather, because it was not material on what part of the Body it was worn. See likewise Alexander ab Alex. Gen. dier. lib. 1. cap. 28. And Britannicus says positively, it was not Corona, but fascia: which agrees likewise with the Etymology of the Word Diadem, which we gave before:

1208. That Sun, &c.] Here the Poet tells us, that the Monarchy being abolish'd, Violence, Oppression, and Tumults began to rage anew, and the Life of Man return'd to its primitive Savageness: However, they at length thought fit to create Magistrates among themselves, and to make Laws, in order to punish the

This made them seek for LAWS, this led their Choice
 To RULERS; Pow'r was giv'n by publick Voice:
 For MEN, worn out, and tir'd by constant Strife,
 1215 At last began to wish an EASY LIFE;
 And so submitted of their own Accord
 To rigid LAWS, and their ELECTED LORD.
 For when each single Man, led on by Rage,
 Grew bloody in Revenge, and strove t' engage
 1220 His Enemy, 'twas an unpleasant Age.
 Hence Men grew weary of continual WARS,
 Which sour'd the SWEET of Life with constant Fears;
 Because diffusive WRONG can spread o'er all;
 No State secure; nay, oft the WRONGS recoil,
 1225 With double Force on the Contrivers fall.

NOTES.

the Oppressors: And this was an Instance of their Prudence; For the dread of Punishment keeps Men in Awe, and retains them within the Bounds of their Duty. And let none imagine they can violate the Laws with Impunity, even tho' they offend in private; For Conscience herself is a Babler; and many, when raving under the Violence of Disease, or even in their Dreams, have been their own Accusers, and betray'd their secret Crimes.

Here we may observe that, Lucretius, from v. 1170. to v. 1233. has solv'd the following Political Problems.

I. Why Man, who was born free, subjected himself from the very Beginning, to the Obedience of Kings? For no Man, as Plutarch elegantly argues, is by Nature born a Slave.

Either for the Respect and Reverence they bore to some Men, on account of their Beauty and Majestick Looks: Or by reason of the superiour Strength of some, by which they compell'd the Weaker to unwilling Obedience and Servitude: or for the Excellence of their Wit, which

easily and justly acquir'd them the Command over others.

II. Why did they confer the Government on one Man? Were there not several endow'd with equal Qualifications? Besides, every Man seems in his own Eyes to be beautiful and witty enough.

Because they deem'd a Monarchy to be preferable to a Government of many, and believ'd they should live more free under the Dominion of one, than of many Rulers.

III. Why did the Beautiful, the Strong and the Witty cease at length to reign?

The Invention of Gold de-thron'd them, for when Men grew rich, the sovereign Authority devolv'd on the most Wealthy.

IV. Why did the Kings fall at first to building of Towers and Citadels?

Either because they apprehended the Insults of Enemies, or were jealous of their own Subjects, whom they oppress'd with too severe a Slavery.

V. How came the Kingly Power, with all its Marks of Royalty,

Nor can those Men expect to live at Ease,
Who violate the common Bonds of Peace.

Tho' now they lie conceal'd from MAN and GOD,
They still must fear 't will some time come abroad:

1230 Since some DISEAS'D, and some BY NIGHT betray }
The wicked ACTIONS, they have done BY DAY; }
Tho' hid in NIGHT; scarce HELL so deep as they. }

Now sing, my MUSE, for that's my next Design, }
Why ALL do bow to SOMEWHAT as Divine? }

1235 Why ev'ry Nation has its proper SHRINE? }
Why ALL do TEMPLES build, why ALTARS raise? }
And why all sacrifice on sacred Days? }

How this diffus'd, this lasting FAME was spread
Of POWR'S ABOVE? Whence came that awful Dread,

1240 That PARENT OF RELIGION thro' the Rout,
Which forces them to bow, and grow devout?

This

NOTES.

Royalty, to be at length totally
subverted and laid aside?

Because nothing resists Envy;
which climbs the loftiest Towers,
and invades the Palaces of Kings:
nay, the Favourites of Fortune
are chiefly expos'd to her As-
saults.

VI. Why were Laws first in-
vented and made?

Perhaps for the Sake of Com-
merce: for Man is a sociable A-
nimal, and indigent of mutual
Offices. Therefore that he might
not be perpetually in Arms, Laws
were invented to establish a Rule
of common Society, and to re-
strain and keep within certain
Bounds the Petulancy and un-
bridled Lust of the Wicked.

1226. Nor can, &c.] For, as
Cicero says very truly, sua quem-
que fraus, suum facinus, suum
scelus, sua audacia de sanitate
ac mente deturbat, Lib. 1. de
finib.

1229. They still, &c.] That
is, as Cicero, lib. 1. de finib.
treating of these Things, says,
nunquam confidant id fore sem-
per occultum, let them never

flatter themselves, that these E-
normities will lie for ever bury'd
in Darkness: because many are
said to have betray'd their
Crimes in their Dreams: and
others, in the delirious Ravings
of a Disease, have discover'd
their abominable Actions, that
had lain a long time conceal'd.

1230. By Night betray, &c.]
Thus Book IV. v. 1012.

Multi de magnis per somnum
rebu' loquuntur,
Indicique sui facti persæpè fir-
ère.

Some talk of State Affairs, and
some betray,
The Plots, their treach'rous
Minds had fram'd by Day.

1233. Now sing, &c.] Reli-
gion, says he, and the Fear of
the Gods, began at the first
Birth of Men: But from whence
had they their Knowledge of the
Deities? It is uncertain, whe-
ther from the Images that flow'd
from the Gods themselves, to
whom Epicurus ascrib'd as it
were, a Body and Blood; or from
Images

This is an easy Task : For NEW-BORN MAN,
 Just sprung from Earth, when first this Frame began,
 DIVINE and GLORIOUS FORMS descending came,
 1245 And struck his MIND by Day, by Night the same :
 But then increas'd, their working Fancies show'd
 Great LIMBS and STRENGTH, and fit to make a God :
 And these they thought had SENSE, because they shook
 As Fancy told, their Limbs, and proudly spoke ;
 1250 Their WORDS were all majestick, as their Look.
 ETERNAL too, because a new Supply,
 A constant Stream, where'er they turn'd their Eye,
 Of FORMS came in, and shew'd the DEITY.
 Nor could they think such mighty Things could fail,
 1255 Or pow'rful Blows on so much Strength prevail.
 And HAPPY too, because no Fear destroys,
 Nor Dread of fullen Death corrupts their Joys.
 Besides, in Dreams they often seem'd to do
 A thousand various Things, and WONDERS show :
 1260 Yet never weary they, but vig'rous still ;
 Their STRENGTH as much unbounded as their WILL.
 Besides they saw the HEAV'NS in Order roul
 Their various Motions round the steady POLE :

The

NOTES.

Images that arose by chance. Now those Images, whatever they were, or from whence soever they came, by continually striking the Minds of Men, either when they were sleeping or awake, were the Cause that Men conjectur'd that some Substances, like those Images, and capable of Understanding, did exist somewhere or other : for the Images seem'd to speak, and to move their Members : And they believ'd them immortal too, because the Form of the Images was always the same, and their Power and Strength, seem'd to be immense : And happy likewise, because they were never terrified at Dangers, nor disturb'd at the fear of Death : and never grew weary, as if they enjoy'd eternal Rest.

1262. Besides, &c.] In these

11. v. he farther asserts, that the Ignorance of natural Causes gave Rise likewise to Religion. For when Men observ'd the Motions of the Heavens, and the Vicissitudes of the Seasons, when they perceiv'd the Hail, the Snow, the Winds, the Thunder, the Lightning, &c. and could not comprehend what should be the Causes of all those wondrous Effects, they concluded that God was the Authour of them : For to whom could they ascribe the constant and continual Motion of the Spheres, rather than to a wise Ruler and Lord ? And where could they place his Abode better, or with greater Reason, than in the Places from whence comes the Snow, the Hail, the Thunder, &c ? Thus argu'd the Epicureans : but much better the Stoicks, who made use of this

The SEASONS OF THE YEAR by constant Laws
 1265 Run round, but knowing not the nat'ral Cause;
 They therefore thought, that Gods must rule above,
 Poor shift! and all at their Devotion move.
 In HEAV'N they plac'd their SEAT, their stately Throne,
 For there the SUN, the STARS, and various MOON,
 1270 And DAY, and NIGHT, their constant Courses run;
 And HAIL, and RAIN, and, thro' a broken Cloud,
 Swift LIGHTNING flies, and THUNDER roars aloud.
 Unhappy MAN, who taught, the Gods engage
 In these; that they are subject unto Rage:
 1275 A Curse to theirs, to ours, and future Age!

What

NOTES.

this very Argument, to assert and prove the divine Providence; which the others brought to oppose it.

Thus Manilius, lib. i. v. 475. speaking of the Motions of the Stars and Spheres:

Nec varios obitus nôrunt, variosque recursus;

Certa sed in proprias oriuntur fydera lucis;

Natalesque suos, occasumque ordine servant:

And v. 483. he adds:

At mihi tam præsens Ratio non ulia videtur,

Quâ pateat mundum divino numine verti,

Atque ipsum esse Deum; nec Forte coïsse magistrâ,

Ut voluit credi, qui, &c.

Which our Translatour thus renders:

The Stars still keep one Course: they still pursue

Their constant Track, nor vary in a new:

From one fixt Point they start, their Course maintain,

Repeat their Whirl, and visit it again:

A most convincing Reason, drawn from Sense,

That this vast Frame is rul'd by Providence;

Which, like the Soul, does ev'ry Whirl advance:

It must be God: nor was it made by Chance,

As Epicurus dreamt, &c.

1273. Unhappy, &c.] This Belief of a Divine Providence, Epicurus held to be the sole Cause of all the Anixeties that disturb the life of Man: and this Opinion of his Lucretius explains in these 25. v. From that Belief, says he, proceeds the vain and causeless Superstition of the greatest Part of Mankind, which is not Piety to the Gods. The Pious Man is he, who looks into himself, who explores the Secrets and Power of Nature, that he may comprehend the Causes of all Things, and wonder at nothing: This is he, who with an undaunted Soul beholds the Motions of the Heavens, and all the other Phænomenons of Nature; because he is convinc'd upon certain Grounds, that all things here below happen without the Care and Intervention of the Gods: But Ignorance is the Parent of Piety.

D d d d

Page

What Grief they brought themselves, to us what Fears?
 To poor Posterity what Sighs, what Tears?
 Alas! what PIETY? Alas! 'Tis none,
 To bend all cover'd to a SENSELESS STONE,
 1280 Lie prostrate, or to visit ev'ry SHRINE,
 Or, with spread Arms, invoke the POW'RS DIVINE
 Before

NOTES.

Papicolam crederes Lucretium,
 says Creech on this Passage.
 Horace Epist. 6. lib. 1.

Nil admirari, prope res est una,
 Numici,
 Solaque quæ possit facere & ser-
 vare beatum.

Hunc solem, & stellas, & dece-
 dentia certis

Tempora momentis, sunt qui for-
 midine nullâ

Imbuti spectent. —

And Virgil.

Fœlix qui potuit rerum cognos-
 cere causas,

— strepitumque Acherontis
 avari

Subjecit pedibus. —

1274. Subject unto rage] Velleius in Cicero explains this Opinion of Epicurus, and gives us the reason of it in these Words: Quæ enim nobis Natura informationem Deorum ipsorum dedit, eadem insculpsit in mentibus, ut eos æternos, & beatos haberemus: Quod si ita est, verè exposita est illa sententia ab Epicuro, quod æternum beatumque sit, id nec habere ipsum negotii quidquam, nec exhibere alteri, itaque neque irâ, neque gratiâ teneri; quod quæ talia essent, imbecilla essent omnia: Nihil enim agit Deus, nullis occupationibus est implicatus, nulla opera molitur; suâ sapientiâ & virtute gaudet: habet exploratum fore se semper tum in maximis, tum in æternis voluptatibus. Hunc Deum ritè beatum dixerimus, vestrum vero laboriosissimum: Nos

enim beatam vitam in animi securitate, & in omni vacatione munerum ponimus. De Natur. Deor. lib. 1. Upon which Lactantius says, that he is apt to believe with Possidonius in the same Cicero, that Epicurus did indeed believe, that there were no Gods at all: and that, what he said of the Immortal Deities, he said only to avoid the Censure of the World: That though he indeed confess'd with his Mouth, that there were Gods, yet he deny'd them in Effect, by exempting them from all manner of Affections, and from all Employment whatever: De Irâ Dei. cap. 4.

1279. To bend, &c.] Lucret. Vertier ad lapidem. For the Romans were wont in their worship of the Images of their Gods, to turn their Bodies round to the right. Plaut. in Curcul. Act. 1. v. 70.

All cover'd] For the Romans likewise worship'd the Images of their Gods, with a Vail hanging down from their Head, Plaut. in Amph. Invocat Deos immortales, ut sibi auxilium ferant, manibus puris, capite operto. The Reason of which Ceremony, you may see at large in Plutarch ἐν ῥωμαίωνις * and in the Life of Marcellus. See likewise the Interpreters of Minutius Felix. p. 10.

1281. Spread Arms] Lucr. Pandere palmas; which was a Custom observ'd likewise in their Supplications to the Gods: Virg. Æneid. 1. v. 97.

Ingemit, & duplices tendens ad sidera palmas.

1298. What

Before their TEMPLES, while the ALTAR flows
With BLOOD of Beasts; and we make Vows on Vows.

But sure 'tis PIETY to view the WHOLE,

1285 And search all NATURE with a quiet SOUL.

For when we view the HEAV'NS, and how the SUN,
And MOON, and STARS their constant Courses run;
Then DOUBTS, that lay oppress'd with other Cares,
Begin to raise their Head, and bring new Fears.

1290 We doubt: What are there GODS, that rule above,
At whose Direction the bright STARS do move?

For IGNORANCE in Causes troubles MAN;

And hence we doubt, if e'er the WORLD began,

If e'er shall end: how long the ORBS shall roul;

1295 How long the STARS run round their steady POLE;

Or if, preserv'd by GODS, can stand the RAGE,

And pow'rful ENVY of devouring AGE.

What MIND's unshaken, and what SOUL not aw'd,

And who not thinks the angry GODS abroad, (hurl'd

1300 Whose Limbs not shrink, when dreadful THUNDER,

From broken Clouds, shakes the affrighted WORLD?

What, do not CITIES, do not NATIONS fear,

And think their dismal DISSOLUTION near?

Why, do not TYRANTS then, and mighty Lords,

1305 Recall their wicked Deeds, and boasting Words,

And

NOTES.

1298. What Mind, &c.] In these 28. v. he says, That Fear is another Cause of Religion: For Men, being frighted at Tempests, Earthquakes, &c. against which they could not struggle with any strength, nor avoid them by any Art or Industry of their own, implor'd the Aid and Assistance of invifible Powers: This was the Beginning of Prayers and Vows; and thus

Primos in orbe Deos fecit Timor.

But what do Vows avail? The Wind still rages on relentless: the un pitying Gods are as deaf

and unmov'd as the Tempest: and Chance alone directs and governs all Things.

1304. Why do not Tyrants, &c.] Thus Shakespear in the Tragedy of King Lear, describing a Tempest,

Man's Nature cannot carry

Th' Affliction, and not fear. Let the great Gods,

Who keep this dreadful Pother o'er our Heads,

Find out their En'mies now, Tremble, thou Wretch,

That hast within thee undivulged Crimes,

And fear, that now REVENGE is surely come?
 Do they not tremble at approaching Doom?
 Besides, when WINDS grow high, when STORMS in-
 And scatter warlike NAVIES thro' the Seas; (crease,
 1310 When Men, for Battel arm'd, must now engage
 A stronger Foe, and fight the Waters Rage;
 Does not the trembling GEN'RAL prostrate fall,
 And beg a CALM o' th' GODS, or prosp'rous GALE?
 In vain: the STORMS drive on; no OFF'RING saves:
 1315 All, shipwreck'd, drink cold DEATH among the WAVES:
 And hence we fancy UNSEEN POW'RS in Things
 Whose Force and Will such strange Confusion brings,
 And spurns, and overthrows our greatest Kings.
 Besides; when EARTHQUAKES shake this mighty
 1320 And tott'ring Cities fall, or seem to fall; (BALL,
 What then if MEN, defenceless MEN, despise
 Their own weak selves, and look with anxious Eyes
 For present HELP, and PITY from the SKIES?
 What Wonder, if they think some POW'RS controul,
 1325 And Gods, with mighty Force, do rule the WHOLE?
 But farther: pow'rful GOLD first rais'd his Head,
 And BRASS, and SILVER, and ignoble LEAD,

When

NOTES.

Unwhipt of Justice: Hide thee,
 thou bloody Hand;
 Thou, Perjur'd; and Thou, simi-
 lar of Virtue,
 That art incestuous: Caitiff, to
 pieces shake,
 That under Covert, and conve-
 nient Seeming,
 Hast practis'd on Man's Life:
 Close pent-up Guilt,
 Rive your concealing Continents,
 and cry
 These dreadful Summoners
 Grace.

1326. But farther, &c.] In
 these 38. v. he teaches how Me-
 tals came first to be discovered,
 what use they put them to, and
 the value they set upon them. He
 ascribes the first Discovery to the
 burning down of the Woods: No
 matter how, nor why they were
 set a fire: but the Heat of the

Flames melted the Metals that
 were dispersed here and there in
 the Veins of the Earth, and made
 them flow into one Mass: Now
 when Men first happen'd to see
 that glittering Body, they were
 surpriz'd at its Splendour, and
 this it was that invited them to
 handle it, and try what it was
 good for: And taking notice, that
 the Figure of each Lump of it
 resembled, and bore a Proportion
 with, the figure of the Hole or
 hollow Place out of which they
 had taken it, they concluded,
 that by melting those Metals
 again, they might bring them in-
 to what Form they pleas'd; and
 that they might be made so thin,
 as to receive an Edge, and be
 sharpen'd: Thus they began to
 make Instruments of each sort of
 Metal; and with them fell to
 cutting down the Woods, cleav'd
 the

When shady Woods, on lofty Mountains grown,
 Felt scorching FIRES; whether from THUNDER thrown,
 1330 Or else by MAN's Design the FLAMES arose,
 Who burnt the neighb'ring Woods to fright their Foes:
 Or else, delighted all with fruitful Grounds,
 They sought more MEADOWS, and enlarg'd their Bounds;
 Or, greedy to increase their store of Food,
 1335 And take the Beasts, they fir'd the shelt'ring Wood:

For

N O T E S.

the Timber; made Beams, &c. Now because the Instruments and Tools they had made of Gold and of Silver, as being softer Metals, were more subject to blunt than the others; those first Men set a greater value upon Brass, because it was the more useful Metal. Whence the Poet takes occasion to say, That those wretched Misers who sit brooding over their unprofitable Gold and Silver, and condemn Brass and Iron, those more useful Metals, act contrary to the Dictates of Nature, who teaches to set value on Things according to the Utility and Usefulness of them.

Gold] Cadmus, the Phœnician, is, by some, said to have been the first, who discover'd Gold: Others say, that Thoas first found it, and that too in the Mountain Pangæus in Thrace, now call'd Malaca, and Castagna: The Chronicon Alexandrinum ascribes it to Mercury, the Son of Jupiter, or to Picus, King of Italy; who, quitting his own Country, went into Egypt, where, after the Death of Misraim, the Son of Cham, he was elected to succeed him in the Royal Dignity, and was, for the Invention of Gold, call'd Θεὸς χρυσεῖον, the golden God. Æschilus attributes the Invention of this and all other Metals to Prometheus: And there are others who write, that either Æacリス, whom Hyginus calls Cæacus, the Son of Jupiter, or Sol, the Son of Ocea-

nus, first discover'd Gold, and that too in Panchaia. See Plin. lib. 7. cap. 56. and Polydore Virgil, lib. 2. de Rer. Invent. cap. 9. Moreover, among the other Metals Lucretius mentions Iron, tho' our Translatour does not. The Authour of the Dispensary describes these Mines of Metals in the Earth, in Lines worth transcribing:

Now those profounder Regions they explore,
 Where Metals ripen in vast Cakes of Ore:

Here, fullen to the Sight, at large is spread

The dull unwieldy Mass of lumpish Lead:

There, glimm'ring in their dawning Beds, are seen

The more aspiring Seeds of sprightly Tin.

The Copper Sparkles next in ruddy Streaks,

And in the Gloom betrays its glowing Cheeks:

The Silver then, with bright and burnish'd Grace,

Youth, and a blooming Lustre in its Face,

To th' Arms of those more yielding Metals flies,

And in the Folds of their Embraces lies:

So close they cling, so stubbornly retire,

Their Love's more violent than the Chymists Fire.

1331. Who burnt, &c.] Here we

For thus Men hunted, whilst no NETS were found,
Nor FORESTS trembled at the barking HOUND:
Whatever 'twas that gave these FLAMES their Birth,
Which burnt the tow'ring TREES, and scorch'd the
Earth,

1340 Hot STREAMS of SILVER, GOLD, and LEAD, and
As NATURE gave a hollow proper Place, (BRASS,
Descended down, and form'd a GLITT'RING MASS.

This when unhappy MORTALS chanc'd to spy,
And the gay COLOUR pleas'd their childish EYE;

1345 They dug the certain CAUSE of MISERY.

And then observing, that it shew'd the FRAME,
And FIGURE of the HOLLOW whence it came;
They thought, these, melted, would with Ease receive
Whatever SHAPES the ARTIST pleas'd to give:

1350 Or drawn to Breadth, or take the keenest Edge;
And so the Hook be fram'd, or subtle WEDGE,

NOTES.

we may observe, that Men wag'd War first of all with Fire, having, before the Invention of Iron, Brass, or Arms, with which they fought afterwards, discover'd the destructive Force of that Element.

1340. Hot Streams, &c.] Aristotle in his Treatise *μετεωρ. 2^a 2^a 3^a* says, that some Shepherds in Spain, having set Fire to certain Woods, and heated the Substance of the Earth, the Silver, that was in the Bowels of it, melted, and flow'd together into a Heap: and that a little while afterwards there happen'd an Earthquake, which cleav'd the Earth, and disclos'd a vast Quantity of Silver, that had flow'd together by that means. This too is confirm'd by Strabo, lib. 3. where he says, that the Mines in Andalusia were discovered by this Accident. So too Athenæus lib 6. c. 4. But of the first Discoverers of Metals, consult the Authours mention'd, v. 1336. and Georg. Agricola lib. 1. de Metal.

1345. They dug, &c.] Thus Ovid. Met. 1. v. 138.

Itum est in viscera terræ,

Quasque recondiderat, Stygiisque
ad moverat umbris,
Effodiuntur opes, irritamenta
malorum.

Jamque nocens ferrum, ferroque
nocentius aurum
Prodierat, prodit bellum, quod
pugnat utroque.

Thus English'd by Dryden,

Then greedy Mortals, rumma-
ging her Store,
Dug from her Entrails first the
precious Ore,

(Which next to Hell the prudent
Gods had laid)

And that alluring Ill to Sight
display'd:

Then cursed Steel, and more ac-
cursed Gold,

Gave Mischief Birth, and made
that Mischief bold,

And

- Or other INSTRUMENTS, all apt, and good
 To CUT, or CLEAVE, or SCRAPE, or HOLLOW Wood :
 But GOLD they try'd in vain ; the METAL broke,
 1355 Or the soft Edge was turn'd at ev'ry Stroke :
 This they contemn'd, the blunted GOLD despis'd,
 And feeble SILVER ; BRASS alone was priz'd.
 But now the feeble, and the useless ORE
 Gets all the HONOUR : BRASS is priz'd no more.
 1360 Thus TIME does change the Dignity of Things :
 For some he bears away with swiftest Wings,
 And hurls into Contempt ; brings others forth,
 And gets them new, and still preserves their Worth.
 Whilst CRUELTY was not improv'd by ART,
 1365 And RAGE not furnish'd yet with SWORD nor DART ;
 With FISTS, or BOUGHS, or STONES the Warriours
 These were the only WEAPONS Nature taught : (fought ;
 But

NOTES.

And double Death did wretched
 Man invade,
 By Steel assaulted, and by Gold
 betray'd.

Milton, in the first Book of Paradise lost, speaking of Mammon:

By him first
 Men also, and by his Suggestion
 taught,
 Ranfack'd the Centre, and with
 impious Hands,
 Rifled the Bowels of their Mother Earth
 For Treasures better hid.

1359. Gets all the Honour :]
 The Authour of the Dispensary
 says to the same Purpose,

Gold makes a Patrician of a
 Slave ;
 A Dwarf, an Atlas ; a Thersites,
 brave :

It cancels all Defects. —
 And Dryden in Amphitryo
 makes Jupiter say,

When I made
 This Gold, I made a greater God
 than Jove,
 And gave my own Omnipotence
 away.

1360. Thus Time, &c.] To
 the same purpose, Dryden

Thus ev'ry Moment alters what
 is done,
 And innovates so act till then
 unknown :

For former Things
 Are set aside, like abdicated Kings.

1364. Whilst, &c.] Since it is
 reasonable to suppose, that the
 veins of Iron, as well as of Brass
 Silver, Lead, &c. were melted
 by the Heat of those burning
 Forests, how comes it to pass,
 that the Antients scarce make any
 mention of Iron, but often of
 Brass ? Because, says he, in these
 16. v. Brass was a more easy
 Metal to work ; and there was
 greater plenty of it : Therefore the
 Weapons and Tools of Husbandry,
 that were first us'd, were
 made of Brass : at length, Iron
 came in Play : a fitter Metal to
 plough and till the stubborn and
 harden'd Earth ; and more proper
 for the daily increasing roughness
 and cruelty of Man.

1366. With Fists, &c.] For as
 Cowley says, David. 3.

These

But when FLAMES burnt the TREES, and scorch'd the
 Then BRASS appear'd, and IRON fit to wound. (Ground,
 1370 BRASS first was us'd, because the softer Ore,
 And Earth's cold Veins contain'd a greater Store :
 Thus BRASS did plough, and brazen TRUMPETS sound,
 Their Weapons BRASS, and BRASS gave ev'ry Wound :
 Thus arm'd, they strait invade their Neighbours Field,
 1375 And take his Beasts : to ARM'D the NAKED yield :
 At last, they, melting down the rigid Mass,
 Made IRON Swords, and then despis'd the BRASS.
 They then began to plough with IRON Shares,
 And IRON Weapons only serv'd in WARS.
 1380 Thus MEN first learn'd to ride a SINGLE HORSE ;
 And whilst their steady LEFT HANDS rul'd the Course,
 Their

NOTES.

These were the first rude Arts
 that Malice try'd,
 Ere Man the Sins of too much
 Knowledge knew,
 And Death, by long Experience,
 witty grew.

1370. Brass first, &c.] Ovid
 Fast. lib. 4.

Æs erat in pretio, Chalybs jam
 massa placebat :
 Eheu ! perpetuo debuit illa tegi.

1372. Thus Brass, &c.] Hesiod.
 Ἔργων, καὶ ἡμερῶν, lib. 1. v. 149.
 speaking of the Brazen Age :

Τοῖς δ' ἦν χάλκεα μὲν τεύχεα,
 χάλκεοι δ' ἐπὶ οἵχοι,
 χαλκῷ δ' ἐργάζοντο, μέλας δ' ἔχον
 ἔσκε σίδηρος.

And Eustathius on Iliad 1. v.
 236. χαλκὸν δ' ἢ τὸ σίδηρον λέγει διὰ
 τὸ πάλαι χρῆσιν τῷ χαλκῷ. &c.
 to which I add this of Athenæus,
 lib. 6. cap. 4. Ἰσοκρίτης τὰ αὐτὰ καὶ
 Φανίας, ἐν τῷ περὶ τῶν ἐν Σικελίᾳ
 τυραννέων· αἷς χαλκῶν ὄντων τῶν
 παλαιῶν ἀναθημάτων, καὶ τριπό-
 δων, καὶ λεβήτων, καὶ ἐγχειριδίων·
 ὧν ἐφ' ἑνὸς καὶ ἐπιγεγραμμένοι φησὶν

Θάιστος μ', ἐπεὶ δ' ἐν Ἰλίῳ
 εὐρεῖ πύργῳ
 ἦν, ὅτε καλλιόμῳ μαρνάμεθ'
 ἄμφ' Ἑλένῃ,
 Καὶ μ' Ἀντινορίδης ἐφόρει κρείων
 Ἑλικάων, &c.

1380. Thus Men, &c.] Having
 made mention of Wars in the
 preceding Verse, he takes occa-
 sion to explain in 48. v. those
 savage, which we call warlike,
 Arts of the first Men, who im-
 prov'd in Cruelty, and grew dai-
 ly more and more ingenious to
 destroy. At first they fought on
 Horseback, and a Horse is a tame
 and gentle Animal : then they
 join'd two Horses to a Chariot,
 then four, and arm'd their Cha-
 riots with Iron Bills and Scythes.
 After this wild Beasts were
 brought to the Wars, Elephants
 by the Africans, Lions by the
 Parthians, then Bulls, Boars, &c.
 But Lucretius himself does not
 believe all this : only having met
 with these Relations in some
 Histories, he mentions them,
 and mingles Truths with Falsi-
 ties. And yet, says he. they are
 not altogether incredible : For
 what has not witty Rage and
 Cruelty invented ? And what
 kind of Assistance and Relief will
 Men

Their stronger RIGHT HANDS fought: before they knew,
Or brought to WARS, a CHARIOT drawn by two:

Then

NOTES.

Men not embrace and refuse, who
labour under Oppression, and
Despair?

To ride a single Horse] Sophocles ascribes the first Invention of the Bridle, and of riding on Horseback to Neptune: Lyfias the Orator, to the Amazons: and others, to others: But Virgil absolutely to the Lapithæ, a People of Thessalia, that inhabited the Mountains, Pindus and Othrys, and were next Neighbours to the Centaurs: Georg. 3. v. 115.

Frœna Pelethronij Lapithæ, gyrosque dedêre,
Impositi dorso: atque equitem docuêre sub armis
Insultare solo, & gressus glomerare superbos.

Thus render'd by Dryden;

———— The Lapithæ add the
State
Of Bits and Bridles; taught the Steed to bound;
To run the Ring, and trace the mazy Ground:
To stop, to fly, the Rules of War to know;
T' obey the Rider, and to dare the Foe.

1383. A Chariot, &c.] The first Invention of Chariots is by Æschylus ascrib'd to Prometheus, by Cicero to Minerva, by the Trezenians to Hippolytus and by Virgil to Ericthonius;

Primus Ericthonius currus & quatuor ausus
Jungere equos, rapidisque rotis insistere victor.

Georg. 3. v. 113.

Bold Ericthonius was the first that join'd
Four Horses, for the rapid Race design'd,
And o'er the dusty Wheels presiding fate. Dryd.

But whether the Poet means that Ericthonius, who was King of the Athenians, the Son of Vulcan and Tellus, who is said to have been Snake-footed, Anguipes, and, to conceal that Deformity, to have first invented a Chariot; or that other Ericthonius, the Phrygian, who was the Son of Dardanus, Grandson of Jupiter, and one of the Ancestours of Æneas, is uncertain. Pliny says the Phrygians first drove a Chariot with two Horses, and Ericthonius one with four: Bigas primum junxit Phrygum Natio, quadrigas Ericthonius. Nat. Hist. lib. 7. cap. 56. Eusebius in Chronic. makes Trochilus the Argive, who was Son of Callithea, the Priestess of Juno, to be the first Inventour of Chariots, and with him agrees Tertullian de Spectac. However he is erroneously call'd Orfilochus by Hyginus, who nevertheless is follow'd in his Errour by Corippus in Panegy. 1. as we find by these Verses, which Scaliger on Eusebius cites:

Orfilochum referunt primas junxisse quadrigas,
Et currus armasse novos, Pelopemque secundum
In soceri venisse necem: —

But Dempster, in his Edition of Corippus, instead of Orfilochum reads Cecropidem, by which he means Ericthonius, who was the

E e e e

fourth

Then four were join'd, and then the ARMED CARS,
1385 And castled ELEPHANTS were brought to Wars ;

The

NOTES.

fourth King of Athens from Cecrops, who founded that City : Others again will have it to have been OEnomaus, the King of Elis : But Theon, the Scholiast of Aratus says plainly, that the Constellation of Heniochus, which the Latines call'd Auriga, the Charioteer, is, εἰδωλον ἢ Βελλεροφοντῆ, ἢ Τροχίλῳ, the Representation either of Bellerophon or of Trochilus, the first Inventour of the Quadriga. Moreover, as to the manner of joining these four Horses in a Chariot, the Antients, as they differ'd from us, so they differ'd among themselves likewise : For some Chariots had two Poles, one between each pair of Horses ; for the Horses went æquatâ fronte, all a-breast : so that all the Horses were ζύγιοι, i. e. jugales, yok'd and harness'd to the Poles : Afterwards Clythenes, the Sycionian, chang'd that manner, and made Chariots with one Pole only ; so that the two middle Horses only were jugales ; the other two, that were outmost to the right and left, had only Reins, and the other necessary Harness and Traces, and were therefore call'd σείροφφοροι, i. e. funales ; and these were more at liberty than those call'd Jugales. Of the funales, Suetonius, in the Life of Tiberius, gives us a remarkable Example in these Words, Tiberius, pubescens Actiaco Triumpho, currum Augusti comitatus est finisteriore funali equo, cum Marcellus, Octaviæ filius, dexteriore veheretur : Which Passage of that Historian Alexander ab Alexandro undertakes to explain, but is mistaken in it ; for he says, that the equi funales are so call'd à funalibus, i. e. à faci-

bus triumphalibus, &c. from the triumphal Torches, which their Riders carry'd in their Hands : But of this see Salmasius in his Plinian Exercitationes, Tom. 2. pag. 899. where he treats of these Matters at large. The several Figures of the Currus quadrijuges may be seen in the Consular and Imperial Coins, which we find represented in Urfinus, Golizius, and in Panvinus de Ludis Circensibus : but above all see Schefferus, who not long ago published a Treatise upon this Subject, intituled de re vehiculari Veterum. Tertullian in his Book de Spectaculis, acquaints us, That Romulus was the first, who brought the Quadriga, or Chariot with four Horses, in use among the Romans : Pliny makes mention of Currus sejuges, Chariots drawn by six Horses, and says, that the first of them among the Romans was in the time of Augustus, to whom the Senate decreed a Chariot with six Horses, as a triumphal Honour, of which nevertheless the Modesty of that Prince would not permit him to accept.

1384. The armed Cars,] Of them, see Book III. v. 615.

1385. Castled Elephants] Because they carry'd Towers on their Backs. Lucretius call them Lucas Boves ; and Faber says, that Lucas is there put for Lucanas, as we find Campanas for Campanas in Plautus : Then he adds, that Elephants were so call'd, because the first time the Romans had seen any, was in the War against Pyrrhus, and at Lucanus, now call'd Lugano, a Town in the Milaneze, Pliny, lib. 8. cap. 6. Elephas Italia primum vidit Pyrrhi Regis bello, & boves Lucas appellavit in Lu-

The MOORS first taught them to endure the Blows,
 And break the Ranks, and Order of the Foes.
 Thus RAGE invented still new Arms for Fight;
 New dreadful Weapons still, and fit to fright:
 1390 Some train'd the furious BULL, and some the BOAR:
 Before the PARTHIAN Ranks did LIONS roar,
 With armed GUIDES sent out to scour the Plain,
 And fright their FOES: but these Designs were vain:
 Because, when hot in fight, they fiercely fall
 1395 On either side, and, common Foes to all,

Con-

NOTES.

Lucanis visas, anno urbis
 CCCCLXXII. This confirms
 the Opinion of Faber: But Varro,
 lib. 6. de Lingua Latinâ, has this
 Passage: Luca bos Elephas, cur
 ita sit dicta duobus modis inve-
 nio scriptum: Nam in C. Ælii
 Commentario à Lybicus Lucas,
 & in Virgini Commentario à
 Lucanis Lucas, ab eo quod no-
 stri maximam quadrupedem,
 quam ipsi habebant, vocarent bo-
 vem; & in Lucanis Pyrrhi
 bello primum vidissent apud
 hostes Elephantes, id est, qua-
 drupedes cornutas, (nam quæ
 dentes multi dicunt sunt cornua)
 Lucam bovem appellasse: Ego ar-
 bitror potius Lucas à luce, quod
 longe relucebant; propter inau-
 ratos regios clypeos quibus eo-
 rum tum ornatæ erant turrets.
 But this reason of Varro's seems
 but weak: And it is cer-
 tain, that Pyrrhus first made use
 of them in Lucania, and after-
 ward s Hannibal in Africa, against
 the Romans. Lucretius calls them
 likewise Anguimanos, Snake-
 handed: for the Proboscis of the
 Elephant is call'd a Hand, in Ci-
 cero 2. de Naturâ Deorum: but
 that Hand is, like a Serpent, vo-
 luble and pliable. Milton.

— Th' unwieldy Elephant,
 To make them Mirth, us'd all
 his Might, and wreath'd
 His lithe Proboscis. —

1386. The Moors] The Afri-
 cans, but more particularly the
 Carthaginians, who, as I said
 before, under their Leader Han-
 nibal, fought against the Romans.

1390. Some train'd, &c.] Here
 the Poet teaches, that in their
 Wars, they likewise made use of
 Bulls, Boars, and Lions, to help
 them to fight their Battels, but
 that these untractable Beasts often
 did them more hurt than good;
 for when the Armies were en-
 gag'd in heat of Action, these
 savage Animals rag'd not on the
 Enemy alone, but turn'd back
 upon their own Masters, and, tear-
 ing them to pieces, put all into
 disorder. See the Note on Book
 III. v. 614.

1391. The Parthian Ranks] The Parthians were a People of
 Asia, who long enjoy'd the Em-
 pire of the East. The Countrey
 they inhabited was call'd Par-
 thia, and lay between Media to
 the West, and Asia to the East;
 and between Persia to the South,
 and Hyrcania to the North:
 It was call'd Parthia, says Ste-
 phanus, from these People, who
 were originally Scythians, and
 fled out of Scythia to the Medes,
 who call'd all Fugitives Parthi,
 and Parthyæi, and thus the
 Countrey, where they settled,
 was from them call'd Parthia.
 It has now several Names. Mer-
 cator calls it Arach: Alphonsus

- Confus'dly ENEMIES, or FRIENDS engage,
 Shaking their dreadful Heads, and fir'd with RAGE :
 The HORSES, frighted with the dreadful Roar,
 Ran o'er the Plain, and would obey no more :
 1400 The BEASTS leap'd on their Friends, and tore their FACE,
 Or seiz'd behind, and with a rude Embrace,
 They bore their wond'ring frighted FRIENDS to Ground ;
 Whilst TEETH, and cruel PAWS did doubly wound.
 The BULLS grew wild, and with destructive Force
 1405 They toss'd, or trod the MEN, or gor'd the HORSE :
 Whole Ranks and Troops fell by the furious BOAR ;
 Their ARMS, yet whole, blush'd with their Masters
 For tho' the HORSES turn'd, tho' oft did rear, (Gore :
 And stand a loft, and paw'd the yielding Air :
 1410 Yet all in vain they strove to shun the Wound,
 Their Nerves all cut, they struck the shaking Ground :
 Thus what seem'd tame at home, grew wild again,
 And fierce, when scouring o'er the warlike Plain :
 Their RAGE was fir'd by TUMULT, WOUNDS, and NOISE,
 1415 Refus'd to hear their former MASTER'S Voice,
 But fled, much mischief done, as furious BULLS,
 When the weak Ax descends, nor breaks their Skulls ;
 They start, and fright the PRIEST, and, bell'wing loud,
 Run frantick round, and gore the PIOUS Crowd.
 1420 'Tis safer far to say that this was done
 In some of ALL the Worlds, than fix on ONE :

Yet

NOTES.

Hadrianus, Jexdi; and Niger,
 Corassau : For, consisting of di-
 vers Provinces, it comes likewise
 to have sundry Names. The
 Parthians were remarkable for
 their Drunkenness, and from
 them came the Proverb, Parthi
 quo plus biberint, eo plus sitiunt.
 The more the Parthians drink,
 the more they are adry; nay, to
 be able to drink a great deal is
 esteem'd honourable among
 them : Their Wine was made of
 the Fruit of the Palm-tree, and
 their chief Food was Grasshoppers.
 Tertullian says, they are so
 addicted to Venery, that they
 mix promiscuously with their
 own Sisters and Mothers: Theft
 is with them unpunish'd : They

neither built Temples, nor erect-
 ed Statues to the Gods; but
 worshipped their King for their
 Deity : However they offer'd Sa-
 crifices in the Mountains to Ju-
 piter, and to Sol, Luna and Tel-
 lus, the Sun, Moon and Earth.
 They held Lying to be the most
 heinous of all Crimes.

1412. Thus what, &c.] In like
 manner an English Poet.

As Lions, tho' they once were
 tame,
 Yet if sharp Wounds their Rage
 inflame,
 Lift up their stormy Voices,
 roar,
 And tear the Keepers they obey'd
 before. — Walm.

Yet I can scarce believe but that they knew,
 Before their sad EXPERIENCE prov'd it rue,
 The Ills of these : but that the WEAKER Side
 1425 The various Methods of CONFUSION try'd,
 Not hoping to subdue, but bring fierce Woes
 And GRIEF, and PAIN upon the STRONGER Foes.
 But more : The GARMENTS, by the ANTIENTS worn,
 Were sew'd with tender TWIGS, or pinn'd with THORN,
 1430 Before they learnt to WEAVE : the WHEEL, the ROUND ;
 Whilst rigid IRON lay within the Ground,
 Were all unknown ; those Things did first begin
 When that appear'd ; and MEN learn'd first to spin :
 Because the WITS of MEN are finer far,
 1435 And fitter to invent than WOMEN's are ;
 Till laugh'd and jeer'd at by the ruder SWAINS,
 They taught the WOMEN, and manur'd the PLAINS,
 And harden'd all their Limbs with rougher Pains.
 NATURE first taught them how to PLANT and sow,
 1440 For they observ'd that falling SEEDS did grow :
 They

N O T E S.

1428. But more, &c.] In these
 11. v. he tells us, That in regard
 to the more civiliz'd Arts, their
 first Care was to cloath them-
 selves, which they did at first
 with the Skins of Beasts, tagg'd
 together with Thorns, nor sew'd,
 nor were the Arts of Spinning, or
 of Weaving yet discover'd : Nor
 indeed was it possible they should
 be so, before the Use of Iron,
 without which the Tools for
 Spinning and Weaving could not
 be made : Nor was Spinning first
 practis'd by Women, but by
 Men ; they being the more in-
 dustrious and inventive Sex :
 till at length the sturdy Peasants
 reproach'd these male Spinsters
 for their effeminate Laziness,
 laugh'd them from the Distaff,
 and brought them to follow the
 more laborious Occupations.

All Arts are generally distin-
 guish'd into two Sorts : I. The
 illiberal, or manual : II. The
 liberal or ingenuous : Of the first
 sort the Number is almost with-
 out Number : yet both Kinds,

tho' very imperfectly, are re-
 duc'd each to a septenary Divi-
 sion, and express'd in the follow-
 ing Distich :

Lingua, Tropus, Ratio, Nume-
 rus, Tonus, Angulus, Astra :
 Rus, Nemus, Arma, Faber,
 Vulnera, Lana, Rates.

The first of which Verses express-
 es the Liberal Sciences, viz.
 Grammar, Rhetorick, Logick,
 Arithmetick, Musick, Geometry,
 and Astronomy : The second,
 the Illiberal ; as Agriculture,
 Hunting, Arts military and fa-
 brile, Chirurgery, Spinning and
 Weaving, and Arts Nautical :
 Of the first Inventours of which,
 see Pliny, Lib. 7. cap. 56. Poly-
 dore Virgil, and Garzone in his
 Piazza Universale : And as to
 the different Esteem and Pra-
 ctice of these Arts among the
 Greeks, and Romans, you may
 consult Aldus Manutius in Qua-
 sit. per Epistol. lib. 2. cap. 9.

1439. Nature, &c.] In these

They saw them fixt, and bound to steady Roots,
Then rise, and spread, and promise noble Fruits:

Then

NOTES.

19. v. the Poet teaches, that Nature herself taught them to plant: for they had observ'd that the Acorns, Berries, &c. that dropt off the Trees, produc'd new Shoots; and this put them upon endeavouring to make them do the like: Every one according to his Capacity added some improvement to the Culture of the Fields and Gardens: And thus by degrees they arriv'd to the perfection in which we now admire them, by the beautiful Order, and regular Disposition of Greens, Flowers, and Fruits.

The Antiquity of Agriculture can not certainly be contested by any other Art; since the three first Men in the World, were a Gardiner, a Ploughman, and a Grazier: Tho' this be an unquestionable Truth, yet the Antients differ'd in Opinion concerning the first Inventour of it: but this variety of Opinions might arise from the several Persons that first introduc'd it into several Countreys: Varro, lib. 3. de R. R. confesses it to be the most antient of all Arts: The Egyptians said, it was first found out by Osyris, or Maneros, Josephus attributes it to Cain, as he does Pasturage to Abel. Antiqu. lib. 1. cap. 3. The Greeks ascrib'd it to Ceres, and the Italians to Saturn. Pliny, lib. 17. cap. 9. says, that King Augeas was the first who invented manuring of Ground by Stercoration, and that he first instructed the Greeks in that Art, as Hercules did the Italians: who nevertheless immortaliz'd, and made a God of, their King Stercutius, the Son of Faunus; if he were not rather the same, as some will have him to be, with Evander, the Arca-

dian, who first introduc'd the Worship of Faunus, that is to say, of Pan, or universal Nature, into Italy, and taught the Latines the Art of manuring Ground, for which he was honour'd by the Name of Stercutius. Tertullian in Apologet. calls him Sterculus or Sterculius; and Servius on Æneid. 8. Sterquilinius, whom he asserts to be the same with Pitumnus, Brother of Pilumnus: By Macrobius he is call'd Stercutus, which he proves to be one of the Names of Saturn: Saturnum Romani etiam Stercutum vocant, quod primus stercore fecunditatem agris comparaverit. Saturnal. lib. 1. cap. 7.

But as no other Art can dispute Antiquity with this of Agriculture, so neither can any lay Claim to an equal share of Dignity: It is indeed as Columella, lib. 1. cap. 1. calls it, *res sine dubitatione proxima, & quasi consanguinea Philosophiæ*, without doubt the next Neighbour, and the nearest of Kin to Philosophy; Varro says the Principles of it are the same with those that Ennius makes to be the Principles of the whole Universe: Earth, Water, Air, and the Sun: And Cicero de senectute, speaking of the Pleasures of a Husbandman, says of them, that they seem to him to approach very near to the Pleasures of a Philosopher, *mihi quidem ad sapientis vitam proximè videntur accedere*. To be a Husbandman, says our excellent Cowley, is but a Retreat from the City, to be a Philosopher apart from the World; or rather, a Retreat from the World, as it is Man's, into the World, as it God's. There is no other sort of Life, that affords so many

Then some began to GRAFT; and till the Field,
 And found the TREES a better burden yield,
 1445 When dress'd with Care, and in a richer Soil;
 The Fruits increas'd, and did reward their Toil:
 They forc'd the cumb'ring WOOD to narrow Bounds,
 Enlarging still their CORN, and PASTURE Grounds:

The

NOTES.

many Branches of Praise to a Panegyrist: the Utility of it to a Man's self; the Usefulness, or rather Necessity of it, to all the rest of Mankind: It's Innocence, it's Pleasure, it's Antiquity, it's Dignity; Under all which Heads that Authour has treated of it in his admirable Essay of Agriculture, to which I refer the Reader.

1443. Some began to graft;] *Lucretius*. *Stirpes committere ramis*: by which he expresses only one of the several ways of Infition, and what we call to graff cleft-wise: *Virgil* in the second *Georgick* teaches the several Ways, by which Trees are propagated, either naturally, or artificially. They may be produc'd three several Ways by Nature:

I. Of their own Accord: as the Broom, the Withy, the Poplar, the Osier, &c. are.

II. By their Seed that drops by Chance: I say, by Chance; for there is a certain way of sowing that belongs to Art: the Trees that grow of fortuitous Seed, are the Chesnut, the Oak, the Beech, &c.

III. By their Root: for the Cherry-tree. Horn-beam, Laurel, &c. will shoot out young Trees from their Roots.

The same Poet teaches, that Trees may be propagated seven several Ways by Art, and the Industry of Men:

I. By Avulsion: That is to say, by plucking up young Shoots,

Roots and all, from the Bodies of Trees, and planting them in the Ground.

II. By Planting the Stocks, that is to say, the lowest and thickest part of the Trunk, together with the Roots: or by taking the Stock without any Root, and either cutting it into a sharp Point at the lower End, or splitting it at the bottom, and then planting it: but the general way is to split it in form of a Cross: and therefore *Virgil* calls such Stocks *quadrifidas*:

— Hic stirpes obruit arvo,
Quadrifidasque fudes, & acuto
robore vallos.

Georg. 2. v. 24.

III. By Propagation: which is chiefly us'd in Vines: and this is done by bending the Shoots or Branches in the shape of a Bow, without cutting them off from the Mother-Tree, and laying down the Top of them into the Ground. The Branch so bent is call'd *Propago*, a Layer. *Milton* describes this way of propagating the Indian Fig-tree, which, says he,

In Malabar or Decan spreads her
 Arms
 Branching so broad and long,
 that in the Ground
 The bended Twigs take Root,
 and Daughters grow
 About the Mother-Tree; a pil-
 lar'd shade

High over-arch'd, and echoing
 Walks between.

IV. By

The Tyrant Wood, that all the Plains did fill,
 1450 Was now confin'd unto the barren Hill:
 And left the VALES to OLIVE, CORN, and VINE,
 Thro' which smooth STREAMS in fair MEANDER's twine;
 Now kiss the tender ROOTS with wanton Play,
 Now flow again, enriching all their Way;
 1455 Such beauteous Pride did all the VALLEYS show,
 So taking pretty, as our GARDENS now,
 Where fruitful TREES in decent Order grow.
 Thro' all the Woods they heard the charming Noise
 Of chirping BIRDS; and try'd to frame their Voice,

And

NOTES.

IV. By taking little Trees or Plants, together with the Earth that covers them about the Root, and transplanting them into another Place.

V. By cutting off a Sucker from a Tree, and planting it, even tho' it have no Root.

VI. By cutting the Stem of the Tree without any Root to it, but in the middle, and into several Pieces, and planting them. This way is chiefly practis'd in the Propagation of the Olive Tree.

VII. When a Branch, or Twig, of one Tree is inserted into another Tree, and that too of a different Kind, and passes into the Nature of it: This is the true Grafting; which is practis'd in two Manners: One, which the Latines call *Infitio*, i. e. Grafting within a Cleft made in the Top of the Stock; which is the ordinary Way now us'd, and properly call'd Grafting: the other, Inoculation, call'd likewise Buding, and grafting Scutcheon-wise: Pliny adds a third way, which he calls *Emplastratio*; which is generally confounded with Inoculation: yet there seems to be this difference between these three Ways of Grafting: That call'd *Infitio*, was done by cleaving the Trunk of the Tree, and putting one or more Twigs into the Cleft: In-

oculation, by making a Aperture between the Bark and the Trunk, and including in it the Graff, or Twig: And lastly *Emplastratio*, by taking off part of the Bark of the Stock, and substituting in its Place the Bud of another Tree, exactly of the like Bigness, so as to fill up the Space of the Bark that is taken away: This is manifest from Pliny, lib. 16. cap. 16, 18, &c. Whence it is evident, that this Art of Grafting has been variously practis'd in different Ages: And our Gardiners at this Day differ from the Method of Virgil, who teaches to make the Aperture in the very Knot or Joint of the Stock; whereas they make it either below or above, in that part of the Bark that is brightest and smoothest.

1452. Meanders] See above, v. 308.

1458. Thro' all, &c.] Musick too, like all the other Arts, when first invented, was rude and unpolished; nor was it more at first than an Imitation of the Chirping and Singing of Birds. Then having observ'd, that Reeds, when shaken by a gentle Gale, sent forth a whispering Murmur, they made themselves Pipes of Reeds: with these the pensive Shepherds were wont to sooth their Cares, and, when the Neighbourhood met to be merry, they

- 1460 And imitate: Thus BIRDS instructed MAN,
 And taught them SONGS, before their ART began:
 And while soft ev'ning GALES blew o'er the Plains,
 And shook the sounding REEDS, they taught the Swains:
 And thus the PIPE was fram'd, and tuneful REED;
 1465 And whilst the tender FLOCKS securely feed,
 The harmless SHEPHERDS tun'd their PIPES to Love,
 And AMARYLLIS sounds in ev'ry Grove.
 Thus TIME, and thus sagacious MEN produce
 A thousand Things, or for DELIGHT, or USE,
 1470 These charm'd the Swains, and these were wont to please
 When Feasts were done; for then all seek for Ease:
 Then

NOTES.

they delighted, with their uncouth
 Airs, the whole Company and
 themselves. In these merry As-
 semblies they first began to
 laugh and jest at one another,
 and to trample the Ground with
 unequal Steps: and this laid the
 first Foundation of Dancing.
 Thus they diverted themselves,
 and knew no better: nor do our
 more artful and melodious Airs
 delight us more, than these un-
 harmonious artless Strains of
 theirs did them: But new things
 always please, and we grow wea-
 ry of the old: Thus Men began
 to loath their Acorns, and to in-
 dulse their Appetites with more
 delicious Food: Thus they de-
 spis'd their grassy Beds, and in-
 vented easy Couches and Beds of
 Down: Thus they laid aside
 their Skins of Beasts, and by De-
 grees cloath'd themselves in Pur-
 ple. This is contain'd in 48. v.

1462. Soft ev'ning Gales, &c.]
 The Western Winds, says the
 Poet, whistling among the Reeds,
 taught them to make Pipes of
 the Stalks: But of the first In-
 vention of Pipes, see Book IV.
 v. 595. and Ovid. Metam. 1.
 v. 705.

1467. Amaryllis] Virgil Eclog. 1.
 Formosam resonare doces Ama-
 ryllida sylvas.

From whence our Translatour
 took the Thought: at least he
 had no hint of it from his Au-
 thour: Amaryllis is a fictitious
 Name, us'd by the Antients in
 their Pastoral Poems, and con-
 tinu'd down to this Day. It is
 deriv'd from the Channels they
 made to convey Water into their
 Meadow Grounds, or to drain
 them, if too wet: for such a
 Conduit the Greeks call'd *ἀμάρυλλον*.

1468. Thus Time, &c.] This
 and the following Verse are re-
 peated below v. 1536.

1471. For then all seek for
 Ease.] Lucr.

Nam tum sunt omnia
 cordi

which is the Reading of all the
 Copies: but Faber says, it ought
 to be *otia cordi*: a judicious E-
 mendation, which our Transla-
 tour has follow'd. Yet Vossius
 on Catullus, p. 167. corrects this
 Passage of our Poet, and says it
 ought to be read, *omnia chordæ*:
 For after Men, says he, have in-
 dulg'd and fill'd themselves with
 eating, nothing is more delight-
 ful than Musick, which at that
 time is, *τὰ πάντα*, all Things.

Then underneath a loving MYRTLE'S Shade,
 Close by a purling STREAM supinely laid,
 When SPRING with gawdy Flow'rs the Earth has spread,
 1475 And sweetest ROSES grow around their Head;
 Envy'd by WEALTH and Pow'r, with small Expence,
 They oft enjoy'd the vast Delight of Sense:
 Then LAUGHING, merry JESTS, and Countrey PLAY,
 And TALES began; as, ONCE UPON A DAY!
 1480 Then pleasant SONGS they sung, and wanton grown,
 Each pluck'd, and bound his FLOW'RS, and made a
 And with uneven STEPS they danc'd around; (CROWN,
 Their heavy Leaps still shook the trembling Ground:
 While all the idle CROWD, that flock'd to view,
 1485 Laugh much, because the TRICKS seem strange and new:
 And thus they pass'd the DAY in gay Delight;
 And watch'd and fed their tender FLOCKS by NIGHT.
 No need of SLEEP: that Want the SONGS supply:
 The Noise chac'd MORPHEUS from their willing Eye.
 1490 These now our WANTONS use; with Toil and Pain,
 They learn to dance in MEASURE: all in vain:
 For these can reap no Joy, no more Content,
 Than what those earth-born SWAINS did first resent.

For

NOTES.

1472. Then underneath, &c.] This, and the five following Verses are repeated from B. II. v. 31. Cowley from Anacreon:

Underneath this myrtle Shade,
 On flow'ry Beds supinely laid,
 With od'rous Oils my Head
 o'erflowing,
 And around it Roses growing;
 What should I do, but drink
 away,
 The Heat and Troubles of the
 Day, &c.

Compare Creech's Translation of this Passage with the Original of Lucretius, and with these Verses of Cowley, and judge from whence he took it.

1481. Each pluck'd and bound, &c.] Lucretius:

Tum caput, atque humeros
 plexis redimire corollis,
 Floribus, &c.

Where the Poet alludes to the Luxury of his own Age, when, in their Feastings, they us'd to trim up their Bowls with Flowers, and to wear Garlands of Roses on their Heads, and round their Necks: and, in a manner, to wallow in them. Tibullus:

Et capite & collo mollia ferta
 gerat.

But of this Custom see at large Book III. v. 896.

1489. Morpheus] The Sun, or rather the Servant, of Somnus, the God of Sleep: See Book IV. v. 1026.

For while we know no better, but possess
 1495 A PRESENT GOOD, it does extreamly please:
 The later GOOD our various Thoughts employs;
 And we condemn the Gust of FORMER JOYS.
 Thus MAN despis'd their antient easy FOOD,
 Their ACORNS, and their APPLES of the WOOD:
 1500 When CLOATHS were found, and other COV'RINGS spread,
 They scorn'd their SKINS of BEASTS, and grassy BED;
 The Skins of Beasts; which, sure the FIRST that found,
 Not long enjoy'd, but by a treach'rous Wound
 He fell: so highly then, the now despis'd,
 1505 Contemn'd, neglected Skins of Beasts were priz'd.
 Thus MEN did fight for SKINS: Those rais'd their
 But GOLD and PURPLE now are Cause of WARS: (Cares;
 The Fault is ours; for they could only find
 These SKINS, as CLOATHS against the COLD and WIND;
 1510 But now what harm, if none go proudly drest
 In CLOTH of GOLD, or an EMBROIDER'D Vest:
 Since MEANER Garments yield as much Defence
 'Gainst WIND and COLD, as much preserve the SENSE,
 Then wretched MAN's Endeavours are in vain;
 1515 They fruitlessly consume their Years in Pain,

Noe

N O T E S.

1495. It does extreamly please:]
 To the same purpose Dryden, in
 the Tragedy of Aurenge-Zebe,
 says finely:

'Tis not for Nothing, that we
 Life pursue;
 It pays our Hopes with some-
 thing still that's new:
 Each Day's a Mistress, unenjoy'd
 before:
 Like Travellers, we're pleas'd
 with seeing more.

1502. Which sure, &c.] Faber
 says, that the first Garment, tho'
 but a worthless, undress'd Skin of
 a Beast, so pleas'd these Earth-
 born Men, that it was the Cause
 of his Death, who first invented
 and wore it.

1506. Thus Men, &c.] But
 this Fighting and Murder for the
 Skin, says the Poet in 14. v. may
 be, in some measure, excus'd: be-

cause before they had found out
 the Art of Weaving, Skins were
 all the Coverings they had to de-
 fend their Bodies from the Cold:
 But what Excuse is there for
 Men, who destroy, and lay all
 things waste, with Wars and Ra-
 pine, that they may shine in
 Gold, and cloath themselves in
 Purple? This nevertheless they
 do, transported with an insatia-
 ble Thirst of Avarice and Ambi-
 tion, and because they are igno-
 rant of that true Pleasure, which
 Epicurus taught; and which is
 not so greedy after Delights, as
 content with Necessaries:

1514. Then, &c.] For Man
 is seldom contented with a Com-
 petency, and never knows when
 he has enough: nor when to put
 a stop to what Ovid calls excel-
 lently well: Amor sceleratus ha-
 bendi. Thus Manilius begins his
 fourth Book;

F f f f 2

Quid

Not knowing how to use, or how to measure
 Their boundless WISH, nor Height of real Pleasure :
 This drives them on into a SEA of Cares,
 And the destructive RAGE, and Storms of WARS.

1520 The SUN, still running round his yearly Race,
 Shew'd all the SEASONS turn'd by constant Cause,
 By certain Order rul'd, and steady Laws :
 Some liv'd in CASTLES then, some built a TOWN,
 And LAND divided, each enjoy'd his own :

1525 Then mighty SHIPS, driv'n by the lab'ring WIND,
 Flew o'er the SEAS, and distant Nations join'd ;
 Whilst LEAGUES and BONDS the neighb'ring TOWNS
 combin'd :

Then

NOTES.

Quid tam sollicitis vitam consumimus annis,
 Torquemurque metu, cæcâque cupidine rerum ?
 Æternisq; senes curis, dum quarimus, ævum
 Perdimus ; & nullo votorum fine beati
 Victuros agimus semper, nec vivimus unquam ;
 Pauperiorque bonis quisque est, quo plura requirat,
 Nec quod habet memorat ; tantum quod non habet, optat.

Which our Translatour has thus render'd :

Why should our Time run out in useless Years
 Of anxious Troubles, and tormenting Fears ?
 Why should deluding Hopes disturb our Ease,
 Vain to pursue, yet eager to possess ?
 With no Success, and no Advantage crown'd,
 Why should we still tread on th' unfinish'd Round ?

Grown grey in Cares, pursue the senseless Strife,
 And seeking how to live, consume a Life ?

The more we have, the meaner is our Store,
 The unenjoying craving Wretch is poor.

1520. The Sun, &c.] Men being convinced by a long Experience, that the Seasons of the Year return in a certain Order, and that nothing is imbroil'd, nothing arrives by Chance, [For the Atoms that at first fortuitously jumbled together, are compos'd in such a manner, both by the Laws of their own Motion, and by the Power of Nature, that unless some Cause from without should hinder and disturb them, they will for ever observe the same Motions] they at length embrac'd a constant and settled Way of Life : To this end they constituted Republicks, and establish'd Commerce between several Nations. Then Poets, the Authours of History, were born : and lastly the Arts, that are subservient to Life, or conducive to Pleasure, were found out : For the Names of the Inventours of them are still preserv'd, and known.

1525. Then mighty Ships, &c.] The Nations, who are fam'd for the Invention of Navigation, are, first the Phœnicians ; from whom it came to the Egyptians, and

and from them to the Greeks ; among whom the first that sail'd are said to be the Cretans. But as to the first Building, and Use of Ships, not to mention Noah's Ark, Clemens Alexandrinus ascribes the Invention to Atlas, the Libyan; Æschylus, to Prometheus ; and Diodorus, Siculus, to Neptune : The Invention likewise of Sails is ascrib'd by the same Æschylus to Prometheus also : by Diodorus to Æolus ; by Pliny and Pausanias to Dædalus, and his Son Icarus : by Casiodorus, lib. 5. Variar. and by Hyginus to Isis ; who, for that Reason, on the Reverse of some of the Roman Coins, is represented, holding in her Hand a Sail, swelling with the Wind : It is certain that the Latines styl'd her Dea Pelagia, as being the President of Navigation : To confirm which we find in Gruterus, p. 312. the following Inscription.

DIIS MANIBUS SAC.
SER. SULPITIO AUG. L.
ALCIMO ÆDITUO
AD ISIDEM PELAGIAM.

Of the Original and first Essays of Navigation, Claudian in the Preface to the Rape of Proserpine :

Inventâ secuit primus qui nave
profundum,

Et rudibus remis sollicitavit a-
quas ;

Tranquillis primum trepidis se
credidit undis,

Littora securo tramite summa
legens.

Mox longos tentare finus, & lin-
quere terras,

Et leni cœpit pandere vela No-
to :

Ast ubi paulatim præceps auda-
cia crevit,

Cordaque languentem dedidi-
cère metum ;

Jam vagus erupit pelago, cœlum-
que secutus,
Ægeas hyemes, Ioniumque do-
mat.

1526. And distant Nations
join'd ;] Thus too Manilius, lib.
1. v. 87.

Tum vagus in cœcum penetravit
navita pontum,
Fecit & ignotis itiner commercia
terris.

Which Creech thus renders :

Thro' Seas unknown the Sailer
then was hurl'd ;
And gainful Traffick join'd the
distant World.

The Original of Traffick is generally ascrib'd to the Phœnicians : some indeed, particularly Phornutus, or Cornutus, de Naturâ Deorum, and Cæsar, lib. 6. de Bello Gall. attribute it to Mercury, whom, for that Reason Arnobius calls, Nundinarum, Mercium, Commerciorumque mutator. lib. 3. adv. Gentes. And that Merchants us'd to sacrifice to him, as to the God of Gain, and President of Negotiation and Commerce, is confirm'd by Ovid. lib. 4. Fastor. where, speaking to Mercury, he says,

Te, quicunque suas profitentur
vendere merces,

Thure dato, tribuas ut sibi lucra
rogant,

This too is confirm'd by that ancient Inscription, that was found at Metz. in the Year 1589. and is recorded by Philippus Thomasinus de Denariis, pag. 274.

MERCURIO NEGOTIATO-
RI

SACRUM
NUMISIUS ALBINUS
EX VOTO.

1528. Then

Then LETTERS found ; and the POETICK Rage
First told the noble ACTIONS of the Age :

But

NOTES.

1528. Then Letters found ;] Cicero says, That the Invention of Letters has circumscrib'd, in a few literal Marks, the Sounds of the Voice, which seem'd infinite : *Sonos vocis, qui infiniti videbantur, paucis literarum notis terminavit.* Tuscul. 1. Suidas calls it, *γραμματική φιλοσοφία*, the grammatical Philosophy, and ascribes the Invention of it to Prometheus : others to the Phœnicians : Thus Lucan :
Phœnices primi, famæ si creditur, auri
Mansuram rudibus vocem signare figuris.

Which Passage Brebœuf, the French Interpreter of that Poet, applying it to Cadmus, who from the Phœnicians brought most of the Letters of the Greek Alphabet into Greece, has render'd in these excellent Verses.

C'est de lui que nous vient cet art ingénieux
De peindre la parole, & de parler aux yeux ;
Et par les traits divers de figures tracées,
Donner de la couleur, & du corps aux pensées.

Which I the rather chuse to take notice of, because they are finely render'd into our own Language by a Person of Quality, and not till now made publick. He that ingenious Art did first descry
Of painting Words, and speaking to the Eye ;
And, by the various Shapes of Figures wrought,
Gave Colour, and a Body to a Thought.

But as to the first Characterizers of Speech, see the learned Digression of Joseph Scaliger de Liter.

antiqu. upon Eusebius : and Petit. in observat. lib. 2. c. 1. To which I add these anonymous Verses, as they are recorded by Crinitus and Giraldus, and from them transcrib'd by Gerard. Joh. Vossius, lib. 1. de Arte Grammat.

Primus Moyſes Hebraicas exavit literas :

Mente Phœnices ſagaci condiderunt Atticas :

Quas Latini ſcriptitamus edidit Niſoſtrata :

Abraham Syras, & idem reperit Chaldaicas :

Iſis arte non minore protulit Ægyptias :

Gulſilas promiſit Getarum quas videmus literas.

But the Origine of Letters is, with greater Appearance of Truth, referr'd by others to Adam himſelf : For is it not highly improbable, that he, who was to tranſmit all Learning and Knowledge down to his Poſterity, ſhould want the neceſſary Conveyances and Inſtruments for ſo great a Work ? And this Opinion is confirm'd by the early Mention that is made of Letters, even in the Days of Seth, who was his Son ; and who no doubt receiv'd them from him. I know not of what Weight it may ſeem, but I can not omit to take Notice, that, in the Vatican Library at Rome, there is extant, to this Day, an antient Picture of Adam, with a Hebrew Inſcription over his Head ; which indeed makes nothing to our preſent purpoſe : but under his Feet there is another in Latine, conceiv'd in theſe Words :

ADAM DIVINITUS EDOCTUS, PRIMUS SCIENTIARUM ET LITERARUM INVENTOR. See Lomeier. de Biblioth. p. 10.

OF THE Several Ways of WRITING, Practis'd by the ANTIENS.



HAVING given this short Account of the first Invention of Letters, it may not be amiss in this Place to give some Account likewise in a short Digression, how those Characters of old preserv'd themselves from Death. And indeed there is scarce any Matter, capable of receiving the Marks of Letters, that some or other of the Antients have not made use of for that Purpose.

The first Letters that we read of were engrav'd in Stone: Witness the two famous Pillars of Enoch, one of which was yet remaining, even in the Days of Josephus: And Jamblicus confesses, that he took the Principles of his mystical Philosophy from the Pillars of Mercury. Pliny, in his Natural History, lib. 7. cap. 5. acquaints us, that the Babylonians, and the Assyrians engrav'd their Laws in Pillars of Brick, in coctis lateribus. And we know that Moses writ his on Stone: Horace too makes mention of this sort of Writing on Stones:

Non incisa notis marmora publicis.

The Roman Laws of the twelve Tables were engraven in Brass: and so too was the League made with the Latines, as Livy witnesses, Decad. 1. Lib. 2. And Talus, of whom are reported many ridiculous Stories, was, upon no other Ground, feign'd by the Cretans, to be a Man made of

of Brass by Vulcan, but because he carry'd about Crete the Laws that were graven in Brass, and put them severely in execution.

Pausanias, in Bœoticis, makes mention of all the Books of Hesiod, that are intitul'd, "Ἔργων ἢ ἡμερῶν", written in Plates of Lead: which sort of Plates Suetonius, in the Life of Nero, calls chartam plumbeam, leaden Paper: But this Custom was in use even before the Days of Job; who himself, chap. 19. cries out: Oh that my words were graven with an iron Pen, and Lead in the Rock for ever: which the Interpreters explain, that he would have the leaden Plates plac'd upon Rocks or Pillars.

They us'd also of old to write on Leaves or Plates of Ivory; and hence the Books were call'd Libri Elephantini; and not, as some imagine from their Bigness and huge Bulk. Thus Martial, Lib. 14. Epigram. 5.

Languida nè tristes obscurant lumina ceræ,
Nigra tibi niveum litera pingat ebur.

Waxen Table-Books were very antient; For Præter sent a Letter in one of them by Bellerophon, as Homer tells us, Iliad. 6. These Table-Books were made of Wood, cover'd with Wax, on which they writ with an Instrument of Iron or Brass, and therefore they were call'd Pugillares, à pungendo, as Aldus Manutius observes, De quæsitis per Epist. lib. 2. Epist. 1. Georgius Longus; de annulis signatorijs, cap. 8. describes them to be of a triangular Form: but Laurentius Pignorius de servis, p. 116. says, Pugillarum forma fuit oblonga & quadrata, eminenti quâdam margine circumcircâ conclusa, ut vidimus Romæ in veteri arcâ sepulchrali in hortis Cyriaci Mattheii. The same Pignorius in the same Book, p. 117. describes likewise the Form of the Roman Graphium, or Stylus; with which they us'd to write in these waxen Table-Books: It was first made of Iron, but that being dangerous to stab with, and too frequently abus'd in that Practice, was, in after times, forbid at Rome, and publicly prohibited to be worn, as Casaubon notes on Suetonius, lib. 1. cap. 82. and then Styles of Bone were in Use: These were made sharp at one end to cut the Letters, and flat at the other

other, to deface them ; whence the Phrase, *stylum vertere* : This Stylus was usually carry'd in a little Case, call'd *Graphiarium*, as Beroaldus observes on the same Place of Suetonius. As for Slates, and Plates of Wood, it cannot be doubted but that they were us'd to write upon.

Pancirollus tells us, That the Longobards, now by Corruption call'd Lumbards, at their first coming into Italy, made Leaves to write on, of thin Shavings of Wood, some of which he had seen and read in his Days. The Antients writ likewise on the Leaves of Palm-trees, see Pliny, lib. 13. cap. 11. and thence Letters are call'd Phœnicean, not from the Countrey, but from φοῖνιξ, a Palm-tree. Yet Guilandinus de Papyro, makes a mighty Bustle to prove, that Palm-leaves were never us'd to write upon ; he believes that Phœnicea, which Pliny there uses, is not the same with φοῖνιξ, and would have us read *malvarum*, instead of *palmarum*. It is indeed true, that they did antiently write on the Leaves of Mallows likewise, as appears by Isidorus, and the following Epigram of Cinna, which that Authour cites :

Hæc tibi Arateis multùm invigilata lucernis
Carmina, queis ignes movimus æthereos,
Lævis in aridulo malvæ descripta libello,
Prusiacâ vexi munera naviculâ.

But this was not frequent : for the Leaves of Mallows are too soft, to be proper for that Use. The Names of those, who were expell'd the Senate at Athens, were written on Leaves, tho' of what Kind, is uncertain : but from thence the Sentence against them was call'd Ἐμφυλοφορία ; and the Names of those banish'd by the People, were written on Shells : But at Syracuse, the Names of such sentenc'd Citizens were written on the Leaves of the Olive-Tree ; and thence it was call'd Πελαλισμός, ἀπὸ τῆς πελάλης ἐλαίας. And the Cumæan Sybil in Virgil was wont to make use of this sort of Paper :

Fata canit, foliisque notas & carmina mandat.
Æn. 3. v. 444.

Upon which Hortensius cites Varro to prove, that it was peculiar to that Sybil, to describe the Oracles in the Leaves of Palm-trees : But Cerdanus believes it to have been the ge-

neral Custom of those Times, and that they did not yet write on the Barks of Trees, or on the Reed call'd Papyrus, or on Parchment.

Pliny makes mention in several Places of Books made of Linnen: These were publick Records, and call'd by some *Libri lintei*, by others, *Lintæ Mappæ*, and *Carbasina Volumina*, Silken Volumes: Claudian.

————— *Quid carmine poscat*
Fatidico custos Romani carbasus ævi.

And Symmachus *Epistolar. lib. 4.* *Monitus Cumanos lintea texta sumpserunt*: And Pliny says the Parthians us'd to interweave Letters in their Cloaths.

The Antients likewise were wont to write on the thin kind of Skin, that grows between the outmost Bark and the Body of the Tree: And the Paper, which the Chineses, and some Indians use to this Day, seems to be made of that, or something like it: And from thence a Book was call'd *Liber*.

Having try'd all these Experiments, at length they fell to use Paper, which they call'd Papyrus, from a Reed of that Name, that grew in the Fens and marshy Grounds in Egypt, and of which Paper was made: They likewise call'd it *Charta*, from a Town of that Name in the Marshes of Egypt, where it grew. Herodotus in *Terpsichore* says, That even in his Days the Ionians call'd Paper, *Skins*; because in times past they were fain to supply the Want of Paper with Skins, which shews the Errour of Pliny, in saying, that neither Paper nor Parchment were us'd before the Time of Eumenes; from whose City *Pergamus*, Parchment first came, and thence was call'd *Pergamena*: But of the Invention, Use and Improvement of Paper and Parchment, see at large *Melch. Guilandin.* in his *Treatise de Papyr.* I only add, that the *Diphtheræ* of the Greeks were only Skins of Beasts: and that, in which Jupiter is feign'd to keep his Memorial of all Things, was made of the Skin of the Goat, that gave him suck: And many are of Opinion, that the famous Golden Fleece was nothing but a Book, written on a Sheep's Skin. *Diodorus the Sicilian* affirms in his second Book, that the Annals of Persia were written on such Skins: and many more Authorities might be produc'd, if they were needful.

- 1530 But all beyond lies hid in dismal Night,
 And only seen by searching REASON's Light. (began;
 Thus SHIPS, thus CLOATHS, thus WINE, and OIL
 And TOWNS, the Comforts, and Support of Man;
 But better'd all, to due perfection brought
 1535 By searching WITS, from long EXPERIENCE taught,
 Thus TIME, and thus sagacious MEN produce
 A thousand Things, or for DELIGHT, or USE;
 For one Thing known does vig'rous Light impart
 For farther Search, and leads to HEIGHT OF ART.

N O T E S.

The Poetick Rage, &c.] At length the Poets, says Lucretius, began to celebrate in their Hymns the noble Actions of the Heroes of those Days: And this Custom is at this Time observed amongst the Indians, whose Songs are the only Histories they have: Lastly the Poet teaches, that all the other Arts were invented and improv'd by the Sagacity and Experience of Men; insomuch that 'tis hard to say, which of them was first found out.

1536. Thus Time, &c.] This and the following Verse are repeated from above, v. 1467.

1538. For one, &c.] Thus too Manilius, speaking of the Invention of Arts, says,

Semper enim ex aliis alias profeminat usus. Lib. 1. v. 90.

Which Creech paraphrases thus:

New Hints from settled Arts
 Experience gains,
 Instructs our Labours, and rewards our Pains:
 Thus into many Streams one Spring divides,
 And thro' the Valley rous refreshing Tides.

Consonant to which is this of Columella, lib. 10.

Ipsa novas artes varia experientia rerum,
 Et labor ostendit miseris; ususque magister
 Tradidit, ———

And Theocritus in Idyl. 21. ascribes the Invention of all Arts to Want and Necessity:

Ἀπενία, Διόφαντε, μόνα τὰς τέχνας ἐγείρει,
 Αὐτὰ τῷ μόχθῳ διδάσκαλος ἔδ' ἐνδύειν
 Ἀνδράσιν ἐργάσιναι κακὰ παρὲν χόρῳ μέλαινα.

To which may not improperly be apply'd, what Philostratus, in the Life of Apollonius, as cited by Photius, reports of the Temple of Hercules at Gades; where, among other Altars, there was one dedicated to Penury and Art; to intimate, That as Penury stirs up Art, so Art drives away Penury; as Hercules put to Flight, and subdu'd Monsters, the Incitements of his Valour, See Riccard. Brixian. and Casaubon explaining this Passage of the Prologue to Persius;

Magister artis, ingenique largitor
 Venter, ———



ANIMADVERSION,

By Way of

RECAPITULATION,

On the Fifth Book of

LUCRETIIUS.



WHAT Lucretius in this Book asserts from v. 60. to v. 461. that the Sun, the Earth, the Sea, in a Word, the whole Frame of this World has not existed from all Eternity, nor will continue to all Eternity, is believ'd in general by all pious Men, and sound Philosophers : but his proving this Assertion by some probable, and by many strong and unquestionable Arguments, that indeed seems peculiar to Lucretius only : for certainly no stronger Proofs, no more cogent Reasons [I always except the Holy Scriptures] are any where to be found : This makes me wonder the more, how so excellent a Wit could insert those foolish Verses from v. 168 to v. 266. in which he endeavours to evince, that God did not create the World : For he believes, that God is not generous enough, or rather is too spiteful and envious, to do any Thing for the sake of Man ; and fancies, that whatever he does, he does for the sake of himself, of his one Ease and Quiet : If any Man should
give

give such a Character of Epicurus, Lucretius would treat him as an impudent Babbler. In the next place he imagines, that neither God nor Man can have any Notice or Knowledge of any Things, but by the Means of Images. And who is this God? Is it not he whom the Mind of Man perceives, whom all Nations acknowledge and adore? In the next place, who can bear with him, while he enumerates the Faults, as he calls them, of the World? All of them false, and foolishly invented: And were these Defects in the new and infant World? Lucretius himself denies they were; and therefore is the more to blame, to impute the Decays and Flaws in a Building, worn out with Age, to the Fault of the Architect.

From v. 461. to v. 551. he describes the Rise or Birth of the World: And among all the Physiologers, there is not a Description of it more likely to be true, nor more lively and beautiful. The Atoms are mov'd by their own weight, they meet, this makes them rebound, and according to the difference of the Stroke and Weight, the resiltion is made into different Places, where they combine and grow into Bodies.

Having, as he imagines, freed the Deity from all Care and Trouble, and kept him in Ease and Quiet, while the World was making, he proceeds, and from v. 550. to v. 824. delineates the Order: and because he does not assign any one certain Cause of the Motions of the Heavens, of Eclipses, of Day and Night, with that positiveness as some others do, he seems to some to waver in his Opinions: But I insist, that such a Constancy, as they they call it, in an Epicurean Physiologer, would be very ridiculous: for he pronounces, that all things are made and done by CHANCE: and that no Man can determine one, to say, certain Cause, of these Phænomenons, since they may be explain'd in several Manners. Nor should I indeed think a Man worthy of Blame, who assigns several Causes, while among the rest the only true and certain Cause is propos'd. Nor can I imagine a Man could act more agreeably to his Principles, or describe Chance better: resolving all Philosophy, all our Search, and Inquiry into those Matters, into a naked MAYBE: nay, often scarce standing within the comprehensive Bounds of Possibility: But to pass by all the Contradictions that lie in the very Principles, and Beginning of his Hypothesis, let us suppose these Infinite Atoms, moving in this Infinite; and grant they could strike, and take hold, and squeeze

squeeze out the lesser and more agile Parts into Seas, Heaven, Moon, Stars, &c. I ask, why this mighty Mass of Earth as its Nature requires, does not constantly descend? Why is it fix'd and steady? Lucretius answers: Because it lies in congeneal Matter, and therefore presses not: but still the Question returns: Why does not this congeneal Matter fall, since it has Weight, the Epicurean Property of Atoms, and that other fit Matter spread below it? The Demand constantly returns. Besides, this Matter was squeez'd out of the Earth by the descending heavier Particles, and therefore the Mass may press, and descend thro' it: Well then; if this Earth can not be fram'd, neither can any of the other Elements; since, according to his Description, the latter depends on the former. And since he refuses to stand to any one Cause of the Motion of the Sun, or Stars, it would be endless to pursue this flying Bubble, and follow him thro' all the Mazes of Conceit and Fausy. Nor will I add any thing concerning what he alledges of the Magnitude of the Sun, Moon, and Stars, having said before, that that Opinion is too vulgar to be regarded.

Read the rest of this Book, and commiserate a Man of so excellent Parts, who could forget himself, and play the Fool so egregiously: But it is a Fate upon all, who deny a divine Providence, to reason foolishly in Ethicks, and absurdly in Physicks. Yet in the Description he gives us of the State of the first Men, of their Manners and Way of Life, we have a perfect Image of the Manners of all the present barbarous and savage Nations: and in these Earth-born Men of Lucretius, you will easily discover the Cannibals, Brasileans, and several others of the People of the West Indies.

The END of the Fifth B O O K.





T. LUCRETIVS CARUS

OF THE

NATURE OF THINGS.

BOOK VI.

The Argument of the Sixth Book.

I.



THE first 37. Verses of this sixth and last Book of Lucretius contain the Praise of Athens, in which City the Great Epicurus was born ; together with an Encomium of that Philosopher. II. From v. 37. to v. 96. the Poet explains the Argument of this Book, in such a manner as might reasonably be expected from an Epicurean. III. From thence to v. 431. he proceeds to dive into the very Nature of the Things, we call Meteors ; and, that Men might learn not to be dismay'd at the Thunder of angry Jupiter, he teaches, that Thunder is made either by the Collision, or Corrasion, or Disruption of Clouds, when contrary Winds fight against one another : Or, by the Force of Winds,

H h h h

either

either struggling within the Bowels of the Clouds, or driving them with violence against each other : Or, that it is only the Hissing of Flames, that fall from a dry Cloud into a wet : Or, lastly, that Thunder is but the crashing noise of Bodies of Hail and Ice, that, meeting violently in the Air, are dash'd to pieces. As for the Lightning, which the Latines call'd Fulgur, he says it is nothing but Fire, forc'd out of Clouds, either by their Collision, or other Motion : Or the Seeds of Flames, that are driven out of Clouds by the Force of Winds. And then, as to the Thunderbolt, that other sort of Lightning, which the Antients call'd Fulmen, he teaches, That it consists of a subtile and fiery Nature ; That it is conceiv'd and bred in thick and high-built Clouds ; That, being grown to maturity, it bursts out of the Clouds by the Force of Wind, that either breaks through them, dashes them to pieces, or beats from without, with great Violence, against them : That it consists of Atoms so subtile and minute, that it is borne along the Air with wondrous Celerity : and that it is most frequent in the vernal and autumnal Seasons : Then he concludes this Disputation with deriding the superstitious Doctrine of the Thuscans, and others, who held, That Thunder and Lightning are not the Effects of natural Causes, but proceed merely from the Will of the offended, angry Gods, and that Jupiter himself is the Darter of Thunder. And because a Prester, or fiery Whirlwind, which is indeed a sort of Lightning, and all other Whirlwinds are certain Kinds of Meteors, the Poet, from v. 431. to v. 460, disputes IV. concerning them ; and explains the Nature, Causes, Motions, and Differences of them. V. From v. 459. to v. 532, he treats of Clouds and of Rain. Clouds he supposes to be made either of the roughest and most dry Particles of the Air ; or of the
Steams,

Steams, Vapours, and Exhalations, that arise from the Earth and Waters. And as to Rain, he says it is generated, either by Compression, as they term it, or by Transmutation: By Compression, if the Force of the Winds squeeze the Water out of the Clouds; By Transmutation, if the Clouds themselves are chang'd, and distil in falling Drops of Water. VI. In regard to the other Meteors, as the Rainbow, Snow, Wind, Hail, and Frost, he disputes briefly of them, or rather only mentions them, from v. 531. to v. 541. VII. From v. 540. to v. 609. he treats of the several sorts of Earthquakes, and of the Causes of them: which he ascribes, either to Hollow Parts of the Earth, which, falling in, cause it to tremble; or to the tremulous Motion of the Waters, which he supposes the Earth to swim in; or to subterraneous, and other Winds; which either shake the Earth in several Parts, or drive it to and fro. VIII. From v. 608. to v. 646. he treats of the Sea; and teaches, that the reason why it does not increase, notwithstanding the immense Quantity of Water that is continually flowing into it, is, either because of the Vastness of the Sea itself; or because the Heat of the Sun dries up its Waters; or because the Winds, brushing over them, bear much of them away; or because the Clouds draw much Moisture from them; or, lastly, because of the Dryness of the Earth itself, which sucks in, and imbibes, the Waters of the Sea. IX. From v. 645. to 715. he inquires into the Causes of the Fires that are ejected out of *Ætna*; and imputes them either to the Violence of the Wind, or to the exestuation of the Waters of the Sea; which, entring beneath into the Cavities of the Mountain, extrude and force out the Seeds of Flame, that are engender'd and collected there, through the Apertures, that are on the Top of it. X. From v. 714. to v. 735. he treats of the

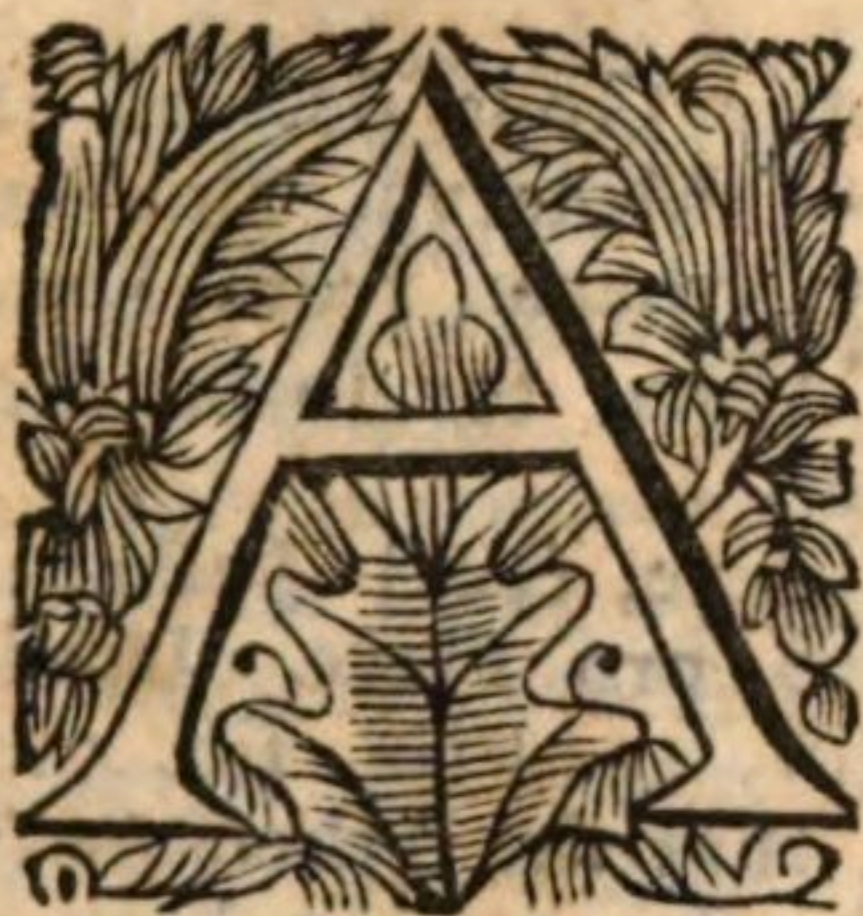
annual Increase of the Nile ; and ascribes it either to the Etesian Winds, that blow full against the Stream of that River ; and thus, hindring its Course, cause the Waters to overflow : or to Heaps of Sand, which the Sea drives to the Mouths of it, and thus choaks them up : or to the Rains, and Snows, that fall, and are melted, near the Fountain of the Nile. XI. From v. 734. to v. 831. he disputes of the Averni, and other Tracts of the Earth, that are noxious, and even deadly, to Birds, Men, Deer, Crows, Horses, &c. XII. From v. 830. to v. 894. he teaches, why the Water of some Wells and Springs is hot in Winter, and cold in Summer. XIII. And thence to v. 1006. he explains at large the attractive Power and Virtue of the Loadstone. XIV. Lastly, from v. 1006. to the End of the Book, he discourses briefly of the Cause and Origine of Plagues and Diseases ; and concludes his Poem with an elegant Description, taken from Thucydides, of the Plague that rag'd in Athens, and almost laid waste and desolate the whole Countrey of Attica, in the Time of the Peloponnesian War.



T. LUCRE-



T. LUCRETIVS CARUS.



THE NS first gave us Laws, and
 chang'd our Food ;
 For ACORNS, tender FRUIT and
 CORN bestow'd
 On wretched Man : Each was a
 mighty Good !
 But then SHE taught us how to live at
 Ease,

5 SHE taught the Joys of Life, and shew'd us PEACE,
 When

NOTES.

Lucretius, who, throughout his whole Poem, is profusely lavish in Praise of Epicurus ; begins this sixth and last Book with the Praises of Athens : which City, he declares, Men ought to honour and revere, not only because Humanity, Learning, Religion, the Tillage of the Earth, the Use of Corn, Laws, and civil Societies are believ'd to have taken Rise there, and to have been from thence distributed amongst all the Nations of the Earth : [Cicero Orat. pro Flacco. Ab Athenis enim humanitas, doctrina, religio, fruges, jura, leges orta, atque in omnes terras distributa putantur:] but chiefly, because it was the Place that gave Birth to Epicurus, who, when he observ'd Men flowing in Abun-

dance of all things necessary to lead a happy and quiet Life, and that nevertheless they wasted their Days in Cares, and Sorrows, and Anxieties, apply'd himself to inquire into the Origine of this great Evil ; and at length discover'd, that the Vessel it self, that is, the Mind of Man was the Cause of this Calamity : For, as whatever things we put into a stinking Vessel are soon corrupted and tainted with the same offensive Odour ; In like manner, if the Mind of Man be unsincere, and not sound, he will never be able so to govern himself, as may be most conducive to his own felicity : In the first place therefore he says, that Epicurus was the Man who first purg'd and cleans'd the Minds of those, whom he instructed

When *EPICURUS* rose ; when HE began,
 That ORACLE OF TRUTH, that MORE than Man ;
 The Fame of whose Inventions still surviv'd,
 And rais'd an everlasting PYRAMID,
 10 As high as Heav'n the Top, as Earth the Basis wide.
 For HE, observing some that could supply
 Contented NATURE's thrifty Luxury,
 Happy in Honours, and in Wealth's Embrace,
 And doubly happy in a noble RACE,
 15 Still groan'd at home ; with Cares and Fears oppress'd,
 Each found a sad Disturber in his Breast,
 Imagin'd strait, some Fault lay hid in MAN,
 Whence this Corruption of the Joys began :

Because

NOTES.

structed in Wisdom ; to whose Affections he put Stops and Bounds of Restraint ; from whose Minds he expell'd Terror ; to whom he reveal'd the chief Good, and shew'd the easy and direct Road, that leads to the Attainment of it ; to whom he taught the Means to obviate all Evils ; and lastly, whom he prov'd to be tormented with vain Anxieties, and to tremble, and be disquieted with causeless and empty Fears. And this is what the Poet says in the first 37.v. of this Book.

1. Athens] The most famous and antient City of Greece, situate on the Sea-Coast of Attica : and built by Cecrops, A. M. 2407. and from him call'd Cecropia : As to its Name, Athens, the Fables say, that a Contest arising between Neptune and Minerva, which of them should give the Name to that City, the Gods, to compose the difference, were pleas'd to decree, that the City should be call'd by the Name of either of them, who should confer the greatest Benefit on Mankind : The Gods were assembled in Judgment, and Neptune darted his Trident against the Earth, which opening was deliver'd of a Horse, a warlike Animal : Minerva struck her Spear into the Ground, and upstarts an Olive-Tree, the Emblem of

Peace ; the Gods decided it in favour of Minerva, who nam'd the City Athenæ, from her own Name 'Αθήνη, for so the Greeks call'd her.

First gave, &c.] Justin. lib. 2. Cicero pro Flacc. Diodorus Sicul. lib. 13. Plin. lib. 7. cap. 56. say, that the Athenians were the first who taught Men, that fed before upon Acorns, to plough the Earth, and to sow Corn : and that they were the first likewise, who made Laws, and compell'd Men to quit their savage way of Life, and to enter into civil Societies.

6. Epicurus] Of whom B. I. v. 88. and the Beginning of B. III.

9. And rais'd, &c.] This and the following Verse are transcrib'd out of Cowley's Ode on the Death of Mrs. Phillips. A Pyramid is a Figure broad at bottom, and smaller and sharper by degrees upwards, till it end in a Point like our Spire-Steeple. It is so call'd from Πύρ, Fire, because Flame ascends in that Figure.

17. Imagin'd strait, &c.] This and the following Verse run thus in the Original.

Intellexit ibi vitium vas efficere ipsum,
 Omniaque illius vitio corrumpierintus,

Where

Because his **WISH** is boundless, vast his **MIND** ;
 20 The Goods ran thro', and left no **SWEET** behind :
 Or else some ill **Opinion** still destroys
 The entering Good, and still sours all his Joys.
 Then **HE**, the mighty **HE**, by pow'rful **Rules**,
 And true **PHILOSOPHY** reform'd our Souls,
 25 **HE** purg'd away all vain and empty **Care**, (fear.
 And taught what **MAN** should hope, what **MAN** should
 The **END**, at which our Actions aim, **HE** show'd,
 And taught an easy **Way** to find the **Good** :
 What we from **CHANCE**, or **NATURE**'s Force may fear,
 30 And taught us how t' avoid, and how to bear,
 And prov'd that **MAN** is fondly vex'd with **CARE**.

For

NOTES.

Where by **Vas**, the Vessel, the Poet means the Mind of Man ; For, in like manner as a Vessel, when it is once imbu'd with an unfavoury Odour, corrupts all the Liquors it receives : So Men too, says the Poet, because they have admitted into their Minds the Fear of the Gods, and the Dread of Punishments after Death, do therefore lead their Lives in tormenting inquietudes, while anxious Cares fluctuate in their uneasy Breasts : From which Cares and Terrours they might deliver their Minds, if they would once consider and believe that the Gods are not the Authors of Things, and that Death to them is nothing : an impious Assertion, but the main Drift of our Poet.

19. His Wish is boundless] Dryden from Juvenal, Sat. 10.

Such is the gloomy State of Mortals here,

We know not what to wish, nor what to fear ;

Ev'n he, who grasp'd the Words exhausted Store,

Yet never had enough ; but wish'd for more ;

Rais'd a top-heavy Tow'r of monstrous Height ;

Which, mould'ring, crush'd him underneath the Weight :

20. The Goods ran thro', &c.] Lucretius here alludes to the Fable of Danaides, or Daughters of Danaus ; of whom B. III. v. 1005. The Allusion is clear in the Original, tho' obscure in this Translation.

26. What Man should hope,] For Epicurus would have had Men set Bounds to their Desires, and content themselves with what the necessities of Nature requir'd : for he said, that the Things, that are neither necessary nor natural, are infinite in Number, and fit only for Fools.

What fear.] He deliver'd the Minds of Men from fear, by proving the Soul to be mortal, by taking away all belief of Providence, and overthrowing all Religion : for he taught that the Gods need not be fear'd because they can not be angry ; and that no Sense remains after Death. An Opinion no less weak than impious.

29. Chance, or Nature's Force] Epicurus held that all the Ills, to which Mortality is subject, happen from Chance, or are the Effects of Nature : And that all the Calamities that attend us, of what Kind soever they be, must be ascrib'd to one of those two Causes : All is Chance or Nature : there is no third to fly to : for

For we, as Boys at Night, at Day do fear
 SHADOWS, as vain, and senseless as those are :
 Wherefore that DARKNESS, that o'erspreads our SOULS,
 35 DAY can't disperse, but those ETERNAL RULES,
 Which from firm Premises TRUE REASON draws,
 And a deep Insight into NATURES LAWS.

And therefore I'll proceed. Since then the SKY
 And all that is, or can be, fram'd on high,
 40 IS MORTAL, once was made, and once must die ;
 Since this is prov'd, now I'll go farther on,
 And finish this so happily begun.

The various WONDERS of the LOWER AIR
 Perplex Men's doubtful Thoughts with vexing Care,
 45 And make the WRETCHES bend with slavish FEAR :
 For Ignorance of Causes heaves the Mind
 To POWR'S ABOVE ; as BIRDS soar high, when BLIND.
 We

NOTES.

for the God of Epicurus, as Ter-
 tullian more than once observes,
penè nemo est, is next to No-
 Body.

32. For we, &c.] You will
 find these 6. v. in the second
 Book, v. 58. See there the Note
 upon them.

38. And therefore, &c.] Hi-
 therto has been only the Praise
 of Epicurus and of Athens. Now
 follows in 58. v. an Explication
 of the Argument of this Book.
 He says, that having in the pre-
 ceding Book treated of the Be-
 ginning of all Things, and of the
 celestial Motions, he will now
 dispute of Meteors, and of the
 other wondrous Effects of Na-
 ture, which Men, who are igno-
 rant of the Causes of them, ascribe
 to the Gods : whence proceed,
 Religion, the vain dread of Pow-
 ers above, groundless Fears, idle
 Apprehensions, tormenting An-
 xieties, &c. These are the Ruin of
 true Piety, and the reason that
 vain Superstition reigns in the
 Minds of deluded and mistaken
 Man.

42. So happily begun.] Here
 our Translatour has wholly o-

mitted the three following Ver-
 ses of his Authour ;

*Quandoquidem semel insignem
 conscendere currum
 Vincendi spes hortata est, atque
 obvia cursu
 Quæ fuerant, sunt placato con-
 versa furore.*

And indeed Lambinus utterly re-
 jects them : and the other Inter-
 preters read them so variously,
 and give them such different Ex-
 plications, as evidently shews,
 that, upon the whole Matter, they
 knew not well what to make of
 them : And for these Reasons I
 resolv'd not to add them in the
 Text of this Translation.

43.] Wonders of the lower
 Air] He means the Meteors,
 Thunder, Lightning, Storms,
 Whirlwinds, Rain, Snow, Hail,
 &c.

47. As Birds soar high when
 blind.] This Similitude, tho' it
 be not in the Original, is so per-
 tinently apply'd in this Place,
 that Lucretius himself, were he
 living, would judge it worthy of
 him.

48. We

We see EFFECTS; but when their CAUSES lie
 Beyond the Ken of vulgar REASON's Eye,
 50 We then ascribe them to the DEITY.
 For ev'n those few exalted SOULS, that know
 The GODS must live at Ease, nor look below;
 If they look up, and view the WORLD ABOVE,
 And wonder how these GLORIOUS BEINGS move,
 55 They are intrap'd, they bind their slavish Chain,
 And sink to their RELIGIOUS FEARS again;
 And then the WORLD with heav'nly TYRANTS fill,
 Whose Force is as unbounded as their Will.
 Deluded Ignorants! who ne'er did see
 60 By REASON's Light, what can, what can not, be:
 How all at last must yield to fatal Force;
 What steady Bounds confine their nat'ral Course:
 And therefore err. If you refuse to fly
 Such Thoughts, unworthy of the DEITY;
 65 But think they act such Things, as break their Ease,
 And opposite to Joy and Happiness;
 Then thou shalt surely smart, and, fanciesing still
 The GODS are angry, fear a coming Ill:
 Tho' no revengeful Thoughts their MINDS employ;
 70 No THIRST to punish Man disturbs their Joy:
 Yet thou dost think their happy quiet AGE
 Still vext with waking Cares, and vi'lent Rage.
 Nor shalt thou visit on the SACRED DAYS
 Their SHRINES with quiet Mind, or sing their Praise.
 75 Besides, the IMAGES, the FORMS, that rise
 From their pure LIMBS, and strike thy REASON'S EYES,
 And constantly present the DEITIES;

}

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Those

NOTES.

48. We see, &c.] This and the two following Verses are in B. I. v. 185. and they should be repeated again below after v. 91. of this Translation, for Lucretius does so in the Original, but Creech has nevertheless omitted them in that Place.

51. For ev'n, &c.] This, and the ten Verses that follow it, are likewise repeated from B. V. v. 87.

57. Heav'nly Tyrants, &c.] Severe and cruel Gods; whom such Wretches as are ignorant of the Causes of Things, fear and adore, as if they were the Au-

thours of them. See B. V. v. 94.

60. By Reason's, &c.] This and the two next Verses are in Book I. v. 99. as well as B. V. v. 97.

71. Yet thou, &c.] Horace in like manner:

——— Namque Deos didici securum agere ævum,
 Nec si quid miri faciat Natura, Deos id
 Tristes ex alto cœli demittere tecto.

Those IMAGES will still disturb thy MIND,
Strike deep, and wound, and leave DESPAIR behind :
80 And then how sad thy Life ! What pungent Cares
Will vex thy wretched Soul ? What anxious Fears ?

But now to chase these PHANTOMS out of sight
By the plain MAGICK of true REASON'S Light ;
Tho' I have sung a thousand Things before,
85 My lab'ring MUSE must sing a thousand more : (flies,
How THUNDER, STORM, and how swift LIGHTNING
Singeing with fiery Wings the wounded Skies !
Left superstitious you observe the FLAME,
If those quick FIRES from lucky Quarters came ;

Or

NOTES.

78. Those Images, &c.] For Epicurus foolishly believ'd, that a God, who foresees all, protects all, and provides for all, must be indeed, a terrible and dreadful God : Infomuch, that the Image of such a God can never enter into the Mind of Man, but Anxiety, Fear, and Terror will be the immediate Effect.

82. But now, &c.] It is next to incredible to believe, to how great a degree wilful Ignorance and Dulness prevail'd among the Antients : and that too, even in the midst of Athens, the chief Seat of Learning. Plutarch, in the Life of Nicias, tells us ; that they could not discover the Reason of the Eclipses of the Moon, but thought it a Portent that foreboded some great Disaster. For, says he, Anaxagoras, who first treated of the celestial Phenomenons, durst not Discourse of them in publick, but only in private, and with some particular Friends : For neither Natural Philosophers, nor those they call'd *Μετεωρολόγους*, i. e. such as argu'd concerning Meteors, were suffer'd among them : they being look'd on as Men, who endeavour'd to limit the Divine Power, and to derogate from it, by ascribing all Things to natural Causes : For which Reason Protagoras was banish'd, and Anaxagoras thrown into Prison ; but Peri-

cles, with much ado, procur'd him to be set at Liberty : Socrates was taken off, meerly for the Name of a Philosopher : for he was averse to Studies of that Nature. At length, the Authority of Plato, as well by reason of the Probity of his Life, as for that he subjected natural Effects, to more potent and divine Causes, wip'd off the Scandal from those Studies, and open'd a way to the Doctrine of the Mathematicks. Thus Plutarch ; who, in the Life of Pericles, farther teaches us, what great Advantages that Athenian General gain'd by his Acquaintance with Anaxagoras : For he there informs us, That he deliver'd his Mind from all Superstition, which strikes a Terroure into those, who are ignorant of the Causes of the celestial Meteors ; and tremble at the Things above, which Consternation, adds the same Author, the Knowledge of natural Causes takes away ; and, instead of that frightful and disquieting Superstition, inspires a secure and quiet Religion, together with good Hope. Thus we see to what tend the Endeavours of Lucretius, in the following Disputation, and how much they ought to be esteem'd.

89. Lucky Quarters] This relates to the Discipline of the Thufcans : Of which Cicero in the second Book de Divinat. Cœlum

in sexdecim partes diviserunt Etrusci: facile id quidem fuit, quatuor, quas nos habemus, duplicare: post idem iterum facere, ut ex eo dicerent, fulmen quâ ex parte venisset. The Thuscans divided the Heaven into sixteen Parts: it was indeed easie for them to do so, by doubling the four we have, and then doing the same again: that they might know by that Means, from what Part comes the Lightning: But the same Quarters were sometimes reckon'd lucky, sometimes unlucky. Lucky, as in this of Virgil:

———— Subitoque fragore
Intonuit lævum. *Æn.* 2. v. 692.

Unlucky, as in this of the same Poet,

Sæpè malum hoc nobis, si mens
non læva fuisset,
De cœlo tactas memini prædicere
quercus:
Sæpè sinistra cavâ prædixit ab
ilice cornix. *Eclog.* 1.

Thus the left side was ambiguously taken by the Romans; often as a good Omen, often as a bad: and the Right, in like manner, was sometimes a lucky Omen, sometimes unlucky. But whence came the same Part to have so different, nay, contrary a Power? Was it because, in the Interpretation of their Auspices, they sometimes had regard to the Place and Site of the Gods, by whom those Bodings were given them, and sometimes to that of the Augurs, who ask'd those Tokens of the Gods? For the Right of the Giver is the Left of the Asker or Receiver: Some favour this Opinion, and ground their Belief on the Testimony of Plutarch lib. de Quæstionibus Romanis: But Cicero suggests another Reason, for lib. 2. de Divin. he says, that the Greeks and Barbarians take the Omens from the Right to be best, as the Romans do those from the Left. Hence the Romans may,

in the Affair of Divination, be said to speak often after their own manner, often after that of the Greeks. However, it is certain, that amongst the Romans, in auspiciis, quæ sinistra sunt, benè eventura putantur; the Auspices on the left were thought to forebode good Success: as Alexander ab Alexandro in his Gen. dier. lib. 5. cap. 13. & Tiraquel. on that place prove at large; without omitting the Reason of it: for they acquaint us, that in taking their Auspicia ex cœlo, their Auspices, or Omens from Heaven, which was the chief kind of all; and on which they most depended; the Thunder or Lightning that came from Heaven, was suppos'd to come from the right Hand of God, when it was on the left of the Auspex, or Soothsayer: as, on the contrary, when it happen'd on his right Side, they believ'd it to come from the left Hand of God; because, they always took it for granted, that his Face was turn'd towards the Auspex. Thus too Donatus, on the intonuit lævum of Virgil, which I cited before, says, Quod dixit lævum, debet prosperum intelligi: cujus ratio hæc est; læva in alijs contraria significant; in sacris autem signis idcirco prospera accipiuntur quæ læva sunt, quia sacrificantis, vel precantis latus lævum dexterum est ejus, qui postulata largitur: So likewise in the Omens taken from the Voices of Birds, the Rule was, that those on the left were always lucky; semper cantus Oscinis, quum sinister est, secundissimus fuit, says Alexander ab Alex. in the Place above cited: Indeed he makes some Exceptions to this Doctrine, but delivers it in general to be true. And here we may observe by the way, that of the Birds, from which the Antients took their Auguries, some were call'd Oscines, and from the Voices of these they drew their Divinations; and others Præpetes, from the manner of whose flight they took

90 Or with sad Omen fell, and how they burn
Thro' closest Stones, and waste, and then return.
And you, my sweetest MUSE, come lead me on

I'm

NOTES.

their Omens: Crows, Swallows, Kites, Owls, and such like Birds, were counted inauspicious; and others, as Vultures, Eagles, Swans, &c. in some cases portended good luck, in others bad: but even this depended too on which side the Bird was; and some Birds were held to be lucky on one side, and unlucky on the other. A Raven was lucky on the Left, a Crow on the Right: *Cor-nix à sinistrâ, Corvus à dextrâ, ratum facit*, says Cicero, de Divin. lib. 1. But which Auguries did the Antient Greeks and Latines take to be left, which right? For both of them, tho' they spoke differently, yet meant the same thing: that is to say, the oriental Omens, or those that came from the East, did to both of them seem to be the best, for this Reason, because the Beginning of Light and Motion is from that Part of the Heavens: and yet what the Greeks call'd right Omens, the Romans call'd left. Concerning the Greeks it is manifest from Homer, Iliad. 12. v. 239. where Hector says, that he values not the augural Birds, whether they go to the Right towards the Aurora and the Sun; or to the left towards the dusky West:

ἔϊτ' ἐπὶ δ' ἔξ' ἰωσι θεῶς ἠὲ
τ' ἡελιόν τε,

ἔϊτ' ἐπ' ἀεισεῖα τοίγε, πολλὸν ζόφον
ἡερέντα.

As to the Romans, it is evident from Varro, who, Epist. Quæst. lib. 5. says, *A Deorum sede cum in Meridiem species, ad sinistram sunt partes mundi exorientes, ad dexteram occidentes: factum arbitror, ut sinistra meliora auspicia, quam dextera, esse existimen-*

tur. Festus Pompeius quotes this Passage, and mentions others of the Antients of the same Opinion: which Pliny, lib. 2. cap. 54. confirms in these Words: *Læva, prospera existimantur, quoniam lævâ parte mundi ortus est.* Now the reason of the different Appellation is, because, in taking their Auguries, the Greeks turn'd themselves towards the North, the Romans towards the South. But to inquire why they did so, would engage me into too long a Digression.

90. Sad Omen] See below, v. 379.

92. And you, &c.] The Poet invokes his Muse in these 4. v. of which, our Translatour, not having fully render'd them, obliges me to give the Original.

Tu mihi supremæ præscripta ad
candida calcis
Currenti spatium præmonstra,
callida Musa,
Calliope, requies hominum, Di-
vûmque voluptas;
Te duce ut insigni capiam cum
laude coronam.

Whence we see, that, notwithstanding what some imagine, that Lucretius never finish'd his Poem, or at least writ more Books that are lost, he never propos'd to himself to write above six; and that he is now hastening ad præscripta candida supremæ calcis: which Seneca helps us to explain: For that Authour, Epist. 19. teaches, That what in the Circus was in his Days call'd Meta, the Goal, the Antients call'd Calx, because the end of the Course was often mark'd with Chalk. Calliope was one of the Muses, so call'd from καλός, Beauty, and ὄψ, ὄπῃ, a Voice: She was Mother of Orpheus, and Pre-

I'm eager, and 'tis Time that I were gone ;
 Come lead me on, and shew the Path to gain
 95 The Race, and Glory too, and crown my Pain.

First then, the dreadful THUNDER roars aloud,
 When FIGHTING WINDS drive heavy CLOUD on CLOUD:
 For where the HEAV'N is clear, the Sky serene,
 No dreadful THUNDER's heard, no LIGHTNING seen;
 100 But where the CLOUDS are THICK, there THUNDERS
 The furious INFANT's born, and speaks, and dies. (rise;
 Now CLOUDS are not so thick, so close combin'd
 As STONES ; nor yet so thin, and so refin'd
 As rising MISTS, or subtile SMOKE, or WIND:

For

NOTES.

President of. Heroick Verse. See B. I. v. 932.

93. I'm eager, &c.] This Verse our Translatour seems to have been fond of: for he repeats it from B. I. v. 930. where it is plac'd with as little Authority from Lucretius, as it is here.

96. First then, &c.] Lucretius begins his Disputation of Meteors; and first of Thunders: the various Motions and Differences of which he explains several ways: And I. in these 13. v. teaches, that the Noise of Thunder is made by the Collision of Clouds, that are driven and dash'd against one another by adverse Winds. And if it be objected, that Clouds are rare and thin Bodies, and therefore very improper and unlikely to make so great a Noise, the Answer is, that the Clouds do not equal Stones and Wood in Density; nor on the other hand, are so rare as Mist, or Smoke: for then indeed they would vanish away: but they are however of a middle Nature between both, and dense enough to contain Hail and Snow.

Diogenes Laërtius says this was the Opinion of Epicurus and Anaxagoras: and we read in Stobæus, that Democritus and the Stoicks too were of the same Belief: Nor does Seneca oppose it, cap. 30. Nat. Quæst. where he

says, Quid enim non quemadmodum illisæ manus plausum edunt, sic illisæ inter se nubium sonus potest esse magnus, quia magna concurrunt? Since even the Hands clapt together make a Noise, why should not the Noise of Clouds dashing against one another be great, seeing they are great Bodies that meet, and strike one another? And to one that objected, Nubes impingi montibus nec sonum fieri, that Clouds strike against Mountains, but make no Noise, he answers: Non quomodocunque nubes illisæ sunt, sonant, sed si aptè sunt compositis ad sonum edendum. Averisæ inter se manus collisæ non plaudunt; sed palma cum palmâ collata plausum facit, the Clouds do not make a Sound in what manner soever, they are dash'd against one another, but only when they are compos'd in a due manner to make a Noise: The Backs of our Hands struck one against another, do not make that Sound of Applause, as when we clap one Palm against the other. This was the Opinion of many of the Antients, and, if we will give Credit to some of our Philosophers at this Day, it is next to Truth.

98. The Sky serene.] For the Epicureans deny'd that it ever thunders, when the Sky is clear: and therefore Horace when he

was

105 For then the upper CLOUDS, like weighty STONE,
 Would fall abruptly, and come tumbling down :
 Or else disperse, like SMOKE, and ne'er inclose
 The hanging Drops of RAIN, nor HAIL, nor SNOWS.
 They give the CRACK, as o'er a THEATRE
 110 Vast CURTAINS, spread, are ruffled in the Air ;

Or

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was about to leave that foolish
 Wisdom, as he calls it, says,

— Namque Diespiter
 Igne corusco nubila dividens,
 Plerumque, per purum tonantes
 Egit equos, volucremque cur-
 rum.

109. They give, &c.] In these
 6. v. he explains, by a Compari-
 son, the Noise that Clouds make
 when they are dash'd by Winds
 against one another, and at the
 same time brings a second Ex-
 plication of Thunder. For one
 single Cloud driven by the Wind,
 is sometimes rent asunder by the
 violence of the Blast : nor shall
 we condemn this Interpretation,
 if we compare the Noise that a
 Cloud so torn makes, with the
 ruffling of Curtains that are
 hung up in a large Theatre ; with
 that of Paper when you tear it
 hastily, or of Cloaths hung a-
 broad, and ruffled by the Wind.

Nardius observes that what Lu-
 cretius in this Place advances,
 that the Noise of Thunder
 may be made by the mutual
 Confrication of Clouds, that
 juggle against one another ; like
 the Noise made by Sails or Cur-
 tains ruffling in the Wind, and
 the like, is altogether improba-
 ble, and agrees but ill with his
 own Doctrine : For having v. 102.
 assign'd a middle Consistency to
 the Clouds, he banishes from
 them that Dryness and Solidity,
 which of necessity all such Bodies
 must have, as, by their Collision
 excite a Sound, that can be per-
 ceiv'd from far : Besides, that

sort of Noise, which is made in
 the Clouds, is not like the mu-
 tual Arietation of solid Bodies :
 For then one only Noise answers
 to one only Blow : but the Roar
 of Thunder lasts, and is repea-
 ted : Nay, sometimes the Cloud
 grumbles for a considerable space
 of Time : and since the Poet pre-
 tends, that this is done by con-
 trary Winds that violently drive
 the Clouds against one another ;
 we add, that when two opposite
 Winds, suppose the North and
 the South, contend with each o-
 ther, no Thunder, but roaring
 Blasts only are then heard : And
 this last Observation is strong a-
 gainst Lucretius : for it never
 thunders except when the Clouds
 move slowly, at least not when
 the Rack drives with Violence :
 and, which is chiefly to be confi-
 der'd, the Clouds grumble, and
 burst out in Thunder, when they
 are not agitated by Winds.

O'er a Theatre] The Roman
 Theatres were uncover'd at Top ;
 and to keep off the Sun or Rain
 from the Spectators, Curtains
 were spread over them : as ap-
 pears by what Lucretius himself
 says, Book IV. v. 75. Propertius
 too mentions these Curtains, lib.
 2. Eleg.

Nec sinuosa cavo pendebant vela
 teatro.

Quintus Catulus was the first
 who introduc'd the use of them,
 when he dedicated the Capitol ;
 and Lentulus Spinter first
 brought up the Use of filken
 Curtains, in the Apollinarian
 Games.

Or torn, (for such a SOUND is often known
From THUNDER'S CRACK) they give a mighty Groan;
Or as spread Cloaths, or Sheets of Paper, fly;
Before the Wind, and rattle thro' the Sky.

115 But CLOUDS meet not directly still, but slide,
And rudely grate each others injur'd Side:
And hence that BUZZING NOISE we often hear,
That with HARSH MURMURS fills the lower Air;
Continues long, but with a softer sound;

120 At length it gathers Strength, and breaks the Bound.

But more, the THUNDER, arm'd with POINTED FLAME,
May seem to shake the World, and break the Frame;
When

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Games. This we have from Pliny, lib. 23. in these Words: *Vela in Theatris tantum umbram fecere, quod primus omnium invenit Q. Catulus, cum Capitolium dedicaret. Carbasina deinde vela primus in Theatrum duxisse fertur Lentulus Spinter, Apollinaribus Ludis.* Of these Curtains see more, B. IV. v. 75.

115. But Clouds, &c.] In these 6. v. he gives us a third Explication of the Noise of Thunder. Sometimes the Noise of Thunder is like a crashing, or creaking Sound; and this happens when the Clouds do not meet full But, as we call it, but only rudely jostle and shock the Sides of one another in an oblique manner. From whence proceeds that clangour, which Lucretius calls *aridus sonus*, a dry Sound; and our Translatour, ver. 118. a harsh Murmur. Thus Milton:

— The Clouds,
Jostling, or push'd by Winds,
rude in their shock,
Tine the slant Lightning, &c.

119. Continues, &c.] Dryden in *Troilus & Cressida* describes this sort of Thunder-Clap.

It comes like Thunder, grum-
bling in a Cloud
Before the dreadful Break, &c.

121. But more, &c.] These 8. v. contain the IVth Explication. Wind, says he, pent up in a Cloud, rages to get free: Thence proceeds a grumbling Noise, till the Wind having burst its Passage, makes a dreadful Roar: Pliny, lib. 2. cap. 43. favours this Opinion, and says; *posse spiritum nube cohibitum tonare, naturâ strangulante sonum dum rixetur, edito fragore cum erumpat, ut in membranâ spiritu intentâ.* That Wind, while it continues shut up in a Cloud, may Thunder: because so long as Nature choaks the Sound, it makes a grumbling Noise, but when the Wind frees its passage, and breaks out, it gives a horrid Clap: as when we break a Bladder, blown hard with Wind. If you are dispos'd to laugh, see Aristophanes in *Nubibus*, Act 1. Scen. 4. Moreover, this was likewise the Opinion of Strato, and Diogenes, but chiefly of Leucippus, Empedocles, and Aristotle, who allow nothing but this to be the cause of Thunder. Moreover, this sort of Thunder which Lucretius explains by the bursting of a blown Bladder, may yet better be explain'd by the Report of our Cannon, elegantly describ'd by Pontanus in *Meteor.* in these Verses.

When e'er a fierce, and strong, and furious WIND,
 In narrow, thick, and hollow CLOUDS confin'd,
 125 Breaks thro' the Prison with a mighty Noise,
 And shoots at Liberty with dreadful Voice:
 Nor is this strange, when one poor BREATH of AIR,
 That starts from broken BLADDERS, sounds so far.
 Again: 'Tis Reason too that NOISE should rise
 130 When violent STORMS rage o'er the lower Skies,
 For thousand CLOUDS appear, rough, close combin'd,
 And thick, and able to resist the WIND:
 Thus NOISE must rise, as when the Woods they wound,
 The vex'd and injur'd BOUGHS sigh forth a mournful Sound.
 135 And WINDS oft cut the CLOUDS, and, passing thro',
 With murmur'ing SOUND fill all the Air below:

For

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Ut cum armata manus tormento
 exclusit ahenō
 Fumantem pilam, versatque vo-
 lubile saxum,
 Inclusi erumpunt ignes nigranti-
 bus auris;
 Fit tremor, horrendumque sonat;
 tum plurimus antē
 Sternit iter fragor, & gemitu
 saxa icta resultant;
 Disjectæque ruunt prostratis
 moenibus arces.

And by Milton in Paradise Lost,
 B. VI.

Immediate in a Flame,
 But soon obscur'd with Smoke,
 all Heav'n appear'd,
 From those deep-throated En-
 gines belch'd, whose Roar
 Embowel'd with outrageous
 Noise the Air,
 And all her Entrails tore, dis-
 gorging foul
 Their devilish Glut, chain'd
 Thunderbolts and Hail
 Of iron Globes, &c.

Now tho' these Implements of
 Mischief were wholly unknown
 to the Antients; yet Epicurus in
 Laërtius, lib. 10. uses almost the
 same Comparison, and says, That
 Thunder may be made by Wind
 shut up in hollow Clouds, even

in like manner as our Vessels
 burst with Noise, when they are
 heated by included Fire. More-
 over, Anaximander and Metro-
 dorus seem to have been of the
 same Opinion; For they held
 Thunder to be a Wind conceiv'd,
 and inclos'd within the Bowels of
 a thick Cloud; and which, break-
 ing out with Violence, makes the
 Noise we call Thunder: and
 that the Lightning is caus'd by
 the Breaking of the Cloud: In
 like manner, added Anaximenes,
 who subscrib'd to this Belief, as
 the Sea, when dash'd and broken
 with Oars, sparkles and shines.

129. Again: &c.] In these 6.
 v. is contain'd Explication V.
 We see, says the Poet, some
 Clouds, whose branchy Edges
 resemble the Boughs of Trees,
 growing out on all sides from the
 Body: and if Winds get in a-
 mong them, why should they
 not cause Thunder? For when
 a rough Blast of Wind blows
 thro' a thick Forest, the shaken
 Branches clash against one ano-
 ther, and make a rattling Noise.

135. And Winds, &c.] In these
 6. v. he gives Explication VI.
 The Clouds, says the Poet, may
 likewise be broken to pieces by
 the Winds, when they beat hard
 upon them: and none can doubt
 but

For that the WINDS may break the Clouds, and fly
 Thro' all Resistance in the lower Sky,
 'Tis easy to discover, since they break,
 140 And twist our TREES: yet here their Force is weak.
 Besides; vast WAVES of CLOUDS seem roul'd above,
 And in confus'd and rumbling Order move:
 These, meeting, strike, and break, and loudly roar,
 As BILLOWS dashing on the trembling shore.
 145 Or else hot THUNDER falls on RAIN, or SNOW,
 And dies, and hisses, as it passes thro':
 As when we quench a glowing MASS, the FIRES
 Fly off with NOISE, with NOISE the Heat expires.
 But if the CLOUD be dry, and THUNDER fall,
 150 Rises a CRACKLING BLAZE, and spreads o'er all;
 As when fierce FIRES, press'd on by WINDS, do sieze
 Our LAUREL GROVES, and waste the VIRGIN TREES;
 The

N O T E S.

but that Winds can shatter the Clouds, since we often see that they tear up the stoutest Trees, and toss their broad Roots into the Air.

141. Besides, &c.] Explication VII. in these 4. v. If you like not these Reasons, imagine the Air to be an immense Sea, and the Clouds its Waves: Let them dash against one another: and they roar no less than the vex'd Billows of a boisterous Ocean, when they insult the Shores that bound them.

145. Or else, &c.] Some Philosophers taught that Thunder was caus'd by the falling of Stars into a wet Cloud, and their struggling with the Moisture: Now Lucretius for the VIIIth Cause of Thunder, in the Room of their Stars, substitutes the Flame of Lightning, which, falling from a dry Cloud into a wet, hisses like red hot Iron, when plung'd into the Smithy. This was particularly the Opinion of Anaxagoras.

149. But if, &c.] Explication IX. That he may be sure to omit none of the Causes of Thunder;

he now in those 6. v. sets the very Clouds on fire; and pretends, that as Laurels and other things crackle in the Flames, Clouds may do so too.

152. Laurel] Pliny, lib. 15. cap. ult. says that Cato distinguish'd between two sorts of Laurel; the Delphick, and the Cyprian: this last has a short, blackish Leaf, turning up at the Edges and indented: The other, a very large Leaf, and bears very large Berries, that turn from green to red: with this the Victors at Delphi, and those that triumph'd at Rome were wont to be crown'd. Pompeius Lænaeus added a third sort of Laurel, which he call'd Mustas, quodd Mustaceis subjiceretur. Lucretius here calls it Delphica laurus, the Laurel being a Tree sacred to Apollo, because, as Pliny, Nat. Hist. lib. 15. cap. 30. says, many very fine Laurels grew on the Mountain Parnassus; and because, as the Interpreter of Hesiod says, ἐνερπὴν δένδρον ἐνθρονισµὸς. Dryden from Chaucer's Tale of the Flower and the Leaf.

The LEAVES all crackle; SHE, that fled the Chase
Of PHOEBUS Love, still flies the FLAMES Embrace.

Or

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The Laurel is the Sign of Labour
crown'd,
Which bears the bitter Blast, nor,
shaken, falls to Ground:
From Winter Winds it suffers no
Decay;
For ever fresh and fair, and ev'ry
Month is May:
Ev'n when the vital Sap retreats
below;
Ev'n when the hoary Head is hid
in Snow;
The Life is in the Leaf, and still
between
The Fits of falling Snow appears
the streaky Green.

Virgin-Trees:] Because Daphne flying from Apollo, to whose Love, she would not consent, was chang'd into a Laurel. See the next Note.

153. The Leaves crackle] Pliny, lib. 15. cap. 36. Laurus manifestò abdicat ignes crepitu. The Laurel, by its crackling in the Flames, shews its natural derestation of Fire.

She that, &c.] This alludes to the known Fable of Phœbus and Daphne, who was feign'd to be the Daughter of the River Peneus in Thessalia, because the Banks of that Stream abound with Laurels. With this Nymph, Phœbus fell in Love, and she, refusing to yield to his Desires, who would have offer'd Violence to her, fled from him, and in her Flight arriving on the Banks of her Father's Flood, and imploring his assistance, was chang'd into a Laurel: Her Transformation is describ'd at large by Ovid. Metam. 1. and finely translated by Dryden, as follows:

Scarce had she finish'd, when her
Feet she found
Benumb'd with Cold, and fasten'd to the Ground:

A filmy Rind about her Body
grows;

Her Hair to Leaves, her Arms
extend to Boughs:

The Nymph is all into a Laurel
gone:

The Smoothness of her Skin re-
mains alone:

Yet Phœbus loves her still, and,
casting round

Her Bole his Arms, some little
Warmth he found:

The Tree still panted in th' un-
finish'd Part,

Not wholly vegetive, and heav'd
her Heart.

He fix'd his Lips upon the trem-
bling Rind,

It swerv'd aside, and his Embrace
declin'd:

To whom the God: Because thou
canst not be

My Mistress, I espouse thee for
my Tree:

Be thou the Prize of Honour and
Renown;

The deathless Poet, and the
Poem, crown:

Secure from Thunder, and un-
harm'd by Jove;

Unfading, as th' immortal Pow-
ers above:

And, as the Locks of Phœbus are
unshorn,

So shall perpetual Green thy
Boughs adorn;

The grateful Tree was pleas'd
with what he said;

And shook the shady Honours of
her Head.

155 Or else vast HILLS of HAIL, and ROCKS of ICE,
May break; and, tumbling, rattle thro' the Skies:
For when rough STORMS conjoin the Parts of HAIL,
Or scatter'd ICE, their Weight must make them fall.

Quick LIGHTNING flies, when heavy CLOUDS rush on,
160 And strike as STEEL and FLINT, or STONE and STONE:

For

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155. Or else, &c.] In these 4. v. is contain'd the Xth and last Cause of the Noise of Thunder: When it thunders, Hail, and many little Fragments of Ice fall in some places, but chiefly in the Northern Climates: Therefore that Noise may well be ascrib'd to the Breaking into Shivers of congeal'd and frozen Clouds.

To this last Opinion subscribes our Countreyman Hobbes, who holds Thunder to be the breaking of a Cloud, congeal'd to Ice; and that breaks by the struggling of inclos'd Air. The Stoicks held it to be a Noise occasion'd by the Collision of two hollow Clouds; and that the Lightning proceeds from their Attrition: This I hinted before; and mention it in this Place again only to say, that Des Cartes differs not much from the Opinion of these Philosophers: for he conceives Thunder to be caus'd, when several flat Clouds, tabulatorum instar, says he, like so many Floors, are driven with Violence, the higher on those below them, and clatter one upon another: and the Lightning to proceed from the Nature of Exhalations, that are included in the Interstices, or Spaces between the Clouds, and which, by their falling upon one another, is crush'd out, and exploded with Violence. But much more consonant to Truth, nay, indeed true, is their Opinion, who hold Thunder to be, a hot and dry Exhalation, of a sulphurous and nitrous Matter, contracted and shut up in a cold and moist Cloud; whence struggling

to get free, it kindles itself by the Agitation, and violently breaks forth from its Confinement. And according to this Opinion Cowley says finely, Why Contraries feed Thunder in the Cloud; What Motions vex it, till it roar so loud. David. 3.

159. Quick, &c.] Hitherto of Thunder: He comes now to inquire into the Causes of Lightning, which may be struck out of harden'd Clouds, dash'd against one another: in like manner as Fire is out of Iron, Flint, or Wood: for we ought to believe that some Seeds of Fire are lurking in the Clouds, as well as in those other Things; says Lucretius in these 6. v.

But before we proceed any farther, it will be necessary to observe, that under the general Name of Thunder, three several Things are comprehended: I. The Noise: which the Greeks call'd Βρονχη, the Latines Tonitru, in English, Thunder. II. The Coruscation, by the Greeks call'd Ἀσπερρη, by the Latines Fulgur, which answers to what we call the Lightning. III. What the Greeks call Κεραυνος, the Latines Fulmen, and we a Thunderbolt. I know that the Antients, especially their Poets, no less than we at this Day, often confounded these three Things, taking one of them for the other, tho' they are different, as will more plainly appear by what shall be said by and by, when I come to explain the Difference between

For then small SPARKS appear, and scatter'd LIGHT
Breaks swiftly forth, and wakes the sleepy Night :
The NIGHT, amaz'd, begins to haste away,
As if those Fires were BEAMS of coming Day.

And

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the Fulgur and Fulmen of the Antients. I now return to Lucretius, who held, that as in Stone, Iron, and Wood, there are Seeds of Fire, which by Attrition may be forc'd out, and struck into Sparkles : So in the Clouds likewise there are Seeds of Fire, that by the Attrition of those Clouds, caus'd by the violent Force of the Wind, may be struck out into Lightning : For tho' the Clouds be moist, yet Fire may nevertheless be generated and produc'd by their Attrition : This Seneca seems to confirm, Nat. Quæst. lib. 2. cap. 25. & 26. where he says, That neither is Fire produc'd without some Moisture, nor are the Clouds wholly watry, but contain a Part that may take Fire, in like manner as we often see the same piece of Wood burning in one Part, and sputtering out Moisture in another: eo modo, quo sæpe in ligno alia pars ardet, alia sudat. Nor is this Opinion contradicted by Pliny, who, lib. 2. cap. 42. says, Posse & attritu, dum in præceps fertur, illum, quisquis est, spiritum accendi : posse & conflictu nubium elidi, ut duorum lapidum scintillantibus fulgetris. And Seneca, in the Place above cited, adds the Example of the Wood of Laurel, and of Ivy, which by Attrition produce Fire. Thus too Democritus in Stobæus Eclog. Phys. says, That Lightning is the Collision of Clouds ; by which Collision, the Corpuscles, that are the efficient Causes of Fire, being by various Confrications, got together, and kindled in one Body, are, as it were, strain'd thro'

the many Pores and Apertures of the Clouds.

Therefore what the Latines call'd Fulgur, is nothing else than Light emitted from the Flame of Fulmen, and diffus'd through the Air. Yet Pliny, lib. 2. cap. 43. Seneca, lib. 2. cap. 16. & 18. and Aristotle, lib. 2. de Meteor. cap. 9. will have the Fire of Fulgur to be more loose and rare, inasmuch as it only cleaves the Cloud, and vanishes into Air : but the Fire of Fulmen to be more compress'd and close ; because it breaks the Cloud with Violence, and sometimes dashes against the Earth. But this seems probable only in the Coruscations without Thunder : but can not be in those that are attended, cum Tonitu ac fulmine : For such Coruscations break the Cloud to pieces, and can not be said to cleave it, but rather to scatter and disperse it on all sides, while the Fulmen itself is directed to one part only. And thus the very moment that the Matter of Fulmen is kindled, the Fulgur or Coruscation is produc'd ; but this Fulgur is momentary, because the Flame of the Fulmen is so too : and if the Fulgur have sometimes any duration, the Flame of the Fulmen must of necessity continue the longer. This is manifest in our Cannon : which being fir'd in the Night, a Coruscation from the Flame of the Powder is diffus'd all around : whence Men that stand at a Distance easily guess, that they shall soon hear the Report.

162. And wakes the sleepy Night, &c.] This and the two next

- 165 And first we SEE the LIGHT, and then we HEAR
 The NOISES : these but slowly reach the Ear ;
 Because the IMAGES of THINGS do fly
 More swift than SOUNDS, and quickly strike the Eye :
 One Instance clears it ; for, observe, and see,
 170 Whene'er a cruel Ax does wound a TREE,
 The TREE strait sighs : but if at Distance shown,
 We SEE the STROKE before we HEAR the GROAN :
 So whilst the NOISE moves slow the WINGED LIGHT
 Flies swiftly on, and strikes the distant Sight :
 175 Tho' both arose at once, that moves the EYES,
 Before the slow-tongu'd THUNDER speaks, and dies.

But

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next Verses our Translatour has added to his Authour. The Thought seems to be taken from Waller's Sea-Fight.

165. And first, &c.] But if Thunder and Lightning be both made by the same Collision of the Clouds, why do we see the Lightning before we hear the Thunder ? Because, says he in these 12. v. Light is swifter than Sound : For common Experience evinces, that the Species of a visible Thing is sooner convey'd to the Eyes, than the Noise it makes is to the Ears. Thus Aristotle, lib. 2. Meteor. speaking of Lightning, says, *γινεῖται μὲν τὸ πλεονάζον τῆς βροχῆς, ἀλλὰ φαίνεται αὐτὸ πρῶτον διὰ τὸ ὅτι τὸ ὄψιν αἰσθητὸν ἢ ἀκοῆς*. The Coruscation is made after the Stroke, and after the Thunder ; but it is seen first, because the Sense of Seeing is swifter than that of Hearing : And in the same place he brings an Instance of Men rowing a Boat in the Water, and says, that they are seen lifting up their Oars the second time out of the Water, by that time the Noise of the first Stroke is heard.

That the Action of Light is quicker than that of Sound ; and that Light is therefore sooner convey'd to the Eyes, than Sound

is to the Ears, is true beyond any Contradiction ; and the Instance Lucretius brings to prove this Assertion is just : for nothing is more certain, than that we see the Motion of the Hatchet, lifted up the second Time to strike, before we hear the Sound caus'd by the first Blow, even tho' we are plac'd but at a small distance from the Striker. The reason of which is, because the Materia subtilis in lucid Bodies, which is the Medium by which we see, consists of Particles, that are much less, and more solid than those of the Air, the Medium by which we hear : And consequently the Motion of that subtile Matter is more quick than that of the Air : because more Strength is requisite to overcome the Resistance of a greater Body, than that of a less : Besides, the greater Body loses much of its Motion, in conquering the Resistance of the Body it meets : Therefore the Air, whose Particles are intricate, and, like those of all other sulphurous Bodies, twisted and intangled in one another ; and in their Magnitude far surpassing those of the subtile Matter, whose very Name supposes something the most minute that can be conceiv'd ; therefore, I say, the Air can not move with equal Swiftmess, as does the Ma-

teria

But more; a CLOUD seems fir'd, a TEMPEST brings
 Swift, trembling FLAMES upon his dreadful Wings;
 When shut within a CLOUD, it scorns the BOUND,
 [180 And strives to break, and whirls, and tumbles round;
 And, whirling, hollows out the WATRY FRAME,
 At last grows hot, takes Fire, and breaks in Flame:
 For MOTION causes HEAT: Thus BALLS of LEAD,
 From ENGINES thrown, have melted as they fled:
 [185 The WIND grows hot, when loos'd from cold Embrace
 Of pressing CLOUDS, and gets a larger Space;
 Strait scatters Sparks of Fire, which swiftly fly,
 And spread quick LIGHTNINGS o'er the lower Sky:
 Then the grave MURMUR comes: the LIGHT appears
 [190 Before the heavy SOUND can reach our Ears.
 Now this is done, when CLOUD lies heap'd on CLOUD;
 Thence LIGHTNING flies, and THUNDER roars aloud.
 Nor

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teria subtilis, whose Particles being extremely minute, and solid, and inflexible, must therefore move more nimbly, and retain their Motion longer. And this is the Reason that the Sense of Seeing is quicker than that of Hearing.

[177. But more, &c.] In these 14. v. he says; That if Thunder be caus'd by the Winds breaking and tearing the Clouds; Lightning is likewise made by the same Winds, that by the Swift-ness of their Motion grow hot, and kindle into Flames, as they are agitated and whirl'd about in the Bowels of the Clouds. Thus Creech interprets this Passage, and says that Gassendus, and all that follow him, are mistaken in their Interpretation of it. Now to confirm this Opinion of Epicurus, we may observe, that several of the Antients seem to have been of the same Sentiment: For Heraclitus, as Seneca, lib. 2. cap. 56. witnesses, held, that this Fulguration is like the Attempts of our Fires, when they begin to kindle, and resembles the first uncertain Flame, now

dying, now rising again at every Puff of the Bellows. And we learn from Plutarch de Placit. Philosoph. lib. 3. cap. 3. that Metrodorus believ'd, that this Coruscation is produc'd, when a Cloud is assaulted and dash'd to pieces by the Wind. And these Opinions are like theirs, who hold, That Motion is the Cause of Heat: For we see many Things grow hot by Motion, as Wheels, the Axletrees on which they are hung, &c.

[183. Thus Balls, &c.] This is no truer than what Virgil writes of the Arrow of Acastes,

Qui tamen æthereas telum con-
 torfit in auras,
 Ostentans artem pariter, arcum-
 que sonantem:

volans liquidis in nu-
 bibus arsit arundo,
 Signavitque viam flammis, te-
 nuesque recessit

Consumpta in ventos: cælo seu
 sæpe refixa

Transcurrunt, crinemq; volantia
 sydera ducunt. Æn. 5. v. 520.

Who

Nor must you think this false ; because the EYE,
 When plac'd below, sees CLOUDS more broad than high :
 195 For, look, and see, the lab'ring WINDS can bear
 Vast Mountain-CLOUDS, and whirl them thro' the AIR :
 The lab'ring WINDS then move but slowly on,
 And, as oppress'd with Burdens, sigh and groan.
 Or when upon a MOUNTAIN's lofty Head,
 200 We see the higher CLOUDS o'er lower spread :
 And, tho' the WINDS all hush'd, they cease to move,
 Yet still the low are press'd by those above :
 Then you may guess their Bulk ; how high they rear !
 How vast these real CASTLES built in AIR !
 205 How great, how strong their HOLLOWs, where the WIND
 Shut up, grows fierce, and scorns to be confin'd,

But

NOTES.

Who, shooting upwards, sends
 his Shaft to show
 An Archer's Art, and boast his
 twanging Bow :
 Chaf'd by the Speed, it fir'd,
 and as it flew,
 A Trail of foll'wing Flames as-
 cending drew ;
 Kindling they mount, and
 mark the shiny Way,
 Across the Skies, as falling
 Meteors play,
 And vanish into Wind, or in
 a Blaze decay. Dryd.

193. Nor must, &c.] In these
 23. v. he answers the Objections
 of those, who pretend that the
 Clouds, tho' they are broad,
 yet cannot be deep or thick e-
 nough to contain within their
 Bowels, such vast Hollows, as
 could be capable to inclose so
 much Wind : To which he adds
 something of the Winds grumb-
 ling within the Clouds, and then
 bursting out into Flames.

197. The lab'ring, &c.] For this
 and the following Verse, our Trans-
 latour has no Authority from his
 Authour : but has transcrib'd
 them from the Bishop of Roche-
 ster's Plague of Athens, and re-
 peats them again almost Word
 for Word, v. 1099. of this Book.

Where indeed they are better ap-
 ply'd than here : For how come
 the Winds, that, in the preceding
 Verse, whirl'd the Clouds thro'
 the Air, which implies a violent
 and swift Motion, to be able to
 move but slowly in this, and to
 groan under the Weight of their
 Burthens ? Dennis speaking of a
 Row of Oaks, as he calls them,
 says finely,

The Tempest sees their Strength,
 and sighs, and passes by,

203. How high they rear !] Sir
 R. Blackmore gives a lively De-
 scription of these Mountain-
 Clouds in the following Verses :

When on their March embat-
 tel'd Clouds appear,
 What formidable Gloom their
 Faces wear !
 How wide their Front ! How
 deep and black their Reer !
 How do their threat'ning Heads
 each other throng !
 How slow the crowding Legions
 move along !
 The Winds, with all their Wings,
 can scarcely bear
 Th' impending Burden of th' op-
 pressive War.

205. The Wind, &c.] Thus
 after

But roars thro' all the CLOUDS; as BEASTS disdain,
The Dens Confinement, and the slavish Chain,
And roar to get their LIBERTY again :

210 And, seeking Way, rouls round the WATRY FRAME,
And gathers num'rous SEEDS of subtile FLAME,
And these it whirls, until the shining STREAMS
Break thro' the CLOUD, and shew their feeble BEAMS.

But more, these glaring FIRES, these FLAMES, may rise
215 And fall to Earth thro' all the spacious Skies,
Because the CLOUDS hold num'rous Parts of LIGHT :
For if they're DRY, their COLOUR's fiery bright :
For they must catch, and hold descending RAYS,
And thus look fiery red, and often blaze :

220 These, press'd by WINDS, to narrow Place retire,
And scatter SEEDS that frame the glaring FIRE.

But farther ; LIGHTNING often seems to glide
When CLOUDS grow RARE ; for, as the WINDS divide,
The

NOTES.

after our Poet Virgil says of the Winds,

*Illi indignantes magno cum murmure montis
Circum claustra fremunt. —*

This way and that th' impatient Captives tend,
And, pressing for Relief, the Mountain rend :

214. But more, &c.] In these 3. v. he proposes another Cause of Lightning, and says, that not only the Seeds of Fire, agitated and whirl'd about in the Clouds, may be kindled into Flames, but the Clouds themselves contain many Corpuscles of Fire, which they receive from the Sun, or from elsewhere : and this is evident from the bright and flamy Colour of some Clouds : Now these Corpuscles, or Seeds of Fire, being forc'd out by the Wind that drives and compresses the Clouds together, make the Lightning. Aristotle says, that several adher'd to this Opinion, which nevertheless he confutes,

lib. 2. Meteor. Empedocles held that this Fire, that catches in the Clouds, is kindled by the Beams of the Sun : but Anaxagoras will have it descend from the highest Æther, which he holds to be Fire.

222. But farther, &c.] He said in the last place, that the Seeds of Fire that are in the Clouds, are driven out by the Strength and Violence of the Wind : But now in these 4. v. he says, that if they are not driven out in that manner, yet they must of Necessity fall down, when the Clouds grow thin, and break, and open of themselves : and that from thence proceeds the mild and gentle Lightning, whose Splendour dazles the Eyes, tho' no Thunder invade the Ear.

By this Breaking, or rather Rarefaction of the Clouds, and the falling down of the Atoms that make the Lightning without any Thunder or Noise, the Poet seems to insinuate the Opinion of Clidemus, who, as Aristotle says, believ'd Lightning not to be real Fire, but only an empty Species, that

The CLOUDS must lose their SEEDS: Those show the
 225 But without THUNDER silently expire. (FIRE,
 But now what SEEDS the THUNDERS Parts compose,
 Their STINKS, their MARKS, and sulph'rous ODOUR
 shows:

For these are signs of FIRE, not WIND, or RAIN:

Nay, oft they burn our TOWNS, and Men complain
 230 Of heav'nly FIRES, and angry GODS, in vain.

Now

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that is to say, that the Cloud, being agitated, and as it were struck and beaten in the humid part of it, brightens in like manner as the Sea foams and turns white, if it be beaten with a Rod. To this purpose too Anaximenes in Stobæus alledges the Example of the Sea turning bright when the Oars cut the Waves. Thus likewise Xenophanes said, that the Cloud by its Motion conceives the Splendour, that lightens: And lastly Animaxander favour'd this Opinion, when he said, that Lightning is only the Wind that turns bright by forcing its way thro' the blackness of the Cloud.

226. But now, &c.] Hitherto the Poet has treated of the Coruscation of Lightning, which the Latines call'd Fulgur: he is now going to dispute concerning the Fulmen, by which the Antients meant the Lightning, that falls and does mischief upon Earth, and which in English is call'd a Thunderbolt: The French call it Carreau de Foudre: which answers exactly to our Denomination of it: The Greeks call'd it κεραυνός; and Aristotle defines it in these Words: τὸ δ' ἀσεχέψαν ἀναπυρῶθεν βαλεῖ ὡς ἀχει τ' ὕψος διεχθεόν, κεραυνός καλεῖται. i. e. The Lightning, if it continues its Course to, and dashes upon the Earth, is call'd a Thunderbolt; Lucretius, even in this Disputation, confounds the Words Fulgur and Fulmen, often using one for the other: and indeed they

both signify Lightning, and the sole Difference is in the Effects they produce: Our Translatour too does the like: nay, sometimes uses the Word Thunder for Lightning, particularly in this Verse; tho' Thunder properly means only the Noise. This Distinction was necessary to be observ'd in Order to the better understanding of the following Disputation: in which the Poet treats of many Things relating to Lightning: I. Of its Nature: II. How it is generated: III. Of its Motion: IV. In what Seasons of the Year it is most frequent: And V. he inveighs against the Superstition of such, as ascribe Thunder to Jupiter; and against the Thuscans, who drew their Auguries from Thunder and Lightning: This Disputation continues to v. 431. and first in these 18. v. he disputes of the Nature of Lightning, and teaches that it must consist of a fiery Substance, because it singes and burns whatever it touches, sets Fire to Houses, &c. But that it pierces thro' Walls, that it melts Gold, Brass, and other Metals, that it draws out the Liquor and leaves the Vessel intire, must be ascribed to the Swiftnefs of its Motion, and the Tenuity and Subtileness of its Fire.

227. Their Stinks, &c.] For things that are blasted by Lightning not only seem burnt, but retain a sulphurous Smell.

Now these celestial FIRES are fram'd above,
 Of PARTS refin'd, and thin, and apt to move :
 Too strong to be oppos'd, they scorn a Bound,
 And pass thro' closest WALLS, as VOICE and SOUND :
 235 They fly with Ease thro' STONE, thro' GOLD, and BRASS :
 And in one Instant melt the stubborn MASS :
 Nay, oft the CASK intire, the LIQUORS flow,
 Because the POINTED FLAMES, with secret Blow,
 Widen the VESSELS Pores in passing thro' :
 240 Which yet the SUN, with all his BEAMS and RAGE,
 And all his FIRES can't do within an Age :
 So quick these PARTS must move, so swift they run,
 So much excel in Force the vig'rous SUN.

Now

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234. And pass, &c.] While the Poet here takes notice of the wonderful Effects of Lightning, he observes the several sorts of it. Aristotle allows only two ; one, which he calls καπνώδης, smoky, which occasions the swarthy Colour of the Things it blasts : the other, λαμπρῆς, clear, to which he ascribes its penetration. But Pliny, lib. 2. c. 51. adds a third sort, which he calls ficcus, dry : whose Nature, says he, is indeed wonderful, since by that Vessels are exhausted of their Liquors, and drawn dry, while the Vessels themselves remain untouch'd : Since Gold, and Silver, and Brasses are melted by it, while the Bags that contain them are not so much as singed, nor even the Wax which seals them in the least melted, nor the Impression disorder'd : Nay, what is yet more strange than all this, Martia Romanorum Princeps, says he, iusta grvida, partu exanimato, ipsa citra ullum aliud incommodum vixit : Martia, a Roman Princess, was struck with Lightning when she was big with Child : which kill'd the Child within her ; but she receiv'd no other

hurt whatever. To which we may add what Seneca says, that it melts the Sword without doing any hurt to the Scabbard ; and all the Iron of a Spear, without so much as scorching the Wood : that it breaks the Vessel, and hardens the Wine, so that it will continue as it were in a Lump, and not run away : but that this Stiffness or Congelation of the Liquor lasts not above three Days, nec citra triduum rigor ille durat, &c. lib. 2. cap. 31. And cap. 52. of the same Book, he says, Valentiora, quia resistunt, vehementius dissipat : cecidentia nonnunquam sine injuria transit : cum lapide, ferroque, & durissimis quibusque confligit, quia viam necesse est per illa impetu quærat ; itaque facit viam, quâ effugiat : teneris & rarioribus parcit, quamquam & flammis opportuna videantur, quia transitu patente minus sævit : &c. But here, since Lucretius gives us this Opportunity, we will, with Nardius, propose several Questions and Problems, relating to Thunder and Lightning, and give the Answers and Solutions of them.

PRO-

PROBLEMS

CONCERNING

Thunder and Lightning.

1. HY is a Man debilitated, and depriv'd of all his Strength by Lightning, even before he is actually struck by it? This was the Observation of Thages, the Thufcan, as Ammianus Marcellin. lib. 13. witnesses.

Because the Blast is quicker than the Bolt: and therefore every Thing is shaken and blasted, before it is struck. But that, which blasts, is pernicious, and collected out of the Averni, says Pliny, lib. 2. cap. 54.

2. Why, as 'tis reported, is not he struck, who either first sees the Lightning, or hears the Thunder? Plin. loc. cit.

Because he provides for his Safety by his Flight: and, as Seneca says, No Man ever fear'd Lightning, without avoiding it. *Nemo unquam fulmen timuit, nisi qui effugit.* Nat. Quæst. lib. 2.

3. Why does one sort of Lightning piercé, another dash to pieces, and another burn? Senec. loc. citat.

This depends on the Quality of the Thing that is struck, and on the Matter of which the Lightning is compos'd: which Matter, if it be subtile, and chance to light on a thin and unresisting Body, pierces it through and through: if the Matter be more dense, and meet with a more solid Body, it enters it indeed, but in the Penetration dashes and tears it to pieces: when the Matter is bituminous, it clings to combustible Bodies, and burns them.

4. Why does it lighten more without Thunder, in the Night, than by Day? Plin. lib. 2. cap. 54.

It lightens likewise in the Day-time: but the Coruscations are drown'd by the superiour Light of the Sun, unless they be vast indeed.

5. Why is it seen to lighten without Thunder? Plin. lib. 2. cap. 54.

It does thunder, but at too great a Distance to be heard : but if no Object intercept the Flame, it may be seen at the most remote Part of the Horizon.

6. Why is Man the only Animal, that Lightning does not always kill outright, tho' it strikes any other Creature dead in a Moment? Plin. lib. cit.

The Matter of Lightning may be less noxious to Man than to Brutes : Or perhaps, because his Lungs are softer and more lax, whence coming to breathe without any forcible Endeavour, without straining, more seldom, and at longer Intervals, he does not so easily respire and suck in the ambient Infection : thus too it happens to the Seel-fish, or Sea-Calf.

7. Why do all Things, that are struck with Thunder, always fall down and lie on the contrary Part? Plin. loc. citat.

The Violence of the Blow tumbles them down in that manner.

8. Why is a Man, who is struck with Lightning, when he is awake, found with his Eyes winking, or half clos'd ; and a Man struck when asleep, with his Eyes broad open? Plin. loc. citat.

This Observation is not always true. But when it does happen, the reason is, because the Bodies, blasted by Lightning, grow stiff in an Instant, and continue exactly in the same Site they were in before : The Man awake, with Eyes winking and half-shut for Fear : the Sleeper, waken'd by the suddain Noise.

9. Why was it not permitted to burn the Body of a Man thus slain? Plin. loc. citat.

Because, tho' they held that the purging Fire of the funeral Pile cleans'd the Soul of its contracted Filth, yet they despair'd that so great Pollution would ever be admitted into their Society. And this too was the Reason why the Greeks burnt not the Bodies of such, as laid violent Hands on their own Persons. Servius in *Æneid*. 3. Quintil. Declam. 10.

10. Why did they esteem it a piece of Religion to bury them in the Earth? Philostrat. in Heroic.

Left Beasts and Birds of Prey should mangle and devour the Body, or the Ferry-man of the Stygian Lake refuse to waft over the wandering Souls. Plin. loc. cit.

11. Why

11. Why are the Wounds of the Thunder-struck colder than the rest of their Body? Plin. *ibid.*

Because the Heat in the other Members is only suffocated; but quite consum'd in the wounded: for all suffocated Things long retain their Heat: but such as corrupt and waste by degrees, grow stiff and cold immediately.

12. Why were Men blasted with Lightning never remov'd, but bury'd in the very Place where they were struck, where-ever it happen'd to be?

Because the Law of Numa forbade Funeral Rites to be paid to a Man kill'd by Lightning: which would have been in some Measure done, if the Body had been remov'd, and carry'd from the Place where it lay.

13. Why did they bury the Body of such a Man, by heaping up Dirt over it?

Because they believ'd that to touch it would offend the Gods.

14. Why were the Augurs permitted to handle such Bodies?

Because Holiness becomes the Holy. *Sacros sacra decent.*

15. Why were the Places that were blasted by Lightning, hedg'd in and inclos'd around?

Left a sacred Thing should be trampled on unawares.

16. What means Lucan by this Verse,

Inclusum Thusco veneratur cespite fulmen?

Because the Place was immediately esteem'd Sacred.

17. For what reason was it thought so?

They believ'd that God seem'd to consecrate it to himself.

18. What then was their Opinion of a Person who was kill'd by Thunder?

They seem to have had the same Opinion of him too: for Artemidorus held that a Man, kill'd in that manner, was not polluted, but ought to be worship'd as a God.

19. Why is the Money melted, and the Bag untouch'd: and in like manner the Sword, while the Scabbard receives no Damage? Seneca in *Quæst. Nat. lib. 1. Q. 31.*

Because of the subtile Force of the Lightning, which passes through some Things; tho' such as are dense, and resist its Force, it instantly tears to pieces.

20. Why

20. Why are Metals melted by Lightning in a moment's time, while the Workmen receive no Damage? Sen. loc. citat.

Because of the Arsenical Spirits, that are in the Lightning: For even the Coiners of Money can render Metals fluid with a very small quantity of Arsenick.

21. Why does the Wine stay in a broken Vessel? Senec. ibid.

Because it is congeal'd by the nitral Spirits.

22. Why does not that Stiffness last above three Days?

Because the remaining sulphurous Spirits, favour'd by the ambient Air, at length overcome the nitral.

Why is the Wine hurtful, and even pernicious? Senec. lib. cit. Q. 3:

By reason of the Virulence of the Arsenick, that the Wine has conceiv'd: For Wines will retain something of Sulphur, as we know by Experience in Rhenish Wines.

Why is the Venom of Serpents taken away by Lightning?

Because Lightning consumes it: Thus the Poyson of Scammony abates by the bare Steam of Sulphur: Which, continu'd for some time, totally takes away its cathartick Virtue.

Why are some Things turn'd black by Lightning?

Because, being burnt, they retain the sooty Marks of the Fire.

Why are some things discolour'd?

Because there is a less Portion of Sulphur in the Lightning, and a greater of some other Combustible: For Fire alone gives Iron a violet Colour, and the Foils that are put under precious Stones are colour'd by Fire only.

To all which I add what Nardius relates of the Wife of a certain Apothecary at Florence, who had been blasted with Lightning, but was still living in his Days, and who, after that Misfortune had happen'd to her, became, of a very cold Temperament, as she had been before, to be of a Constitution so extreamly hot, that she could scarce endure to wear any Cloaths, tho' ever so thin: Of which he gives this Reason: Because, says he, that most subtile Fire consum'd immediately the superfluous Humidity that had been long stagnating in her Members, and imprinted and left behind it some of its own fiery Quality.

- Now, how this Force begins, how THUNDER flies
 245 With that quick Strength, how these fierce Motions rise,
 That break our strongest Tow'rs, our Towns infest,
 Demolish HOUSES, ruin MAN and BEAST,
 That split our TREES, and rage o'er all the Wood,
 I will explain, and make my Promise good.
 250 First then ; 'tis certain THUNDER seems to fly
 From dark, thick CLOUDS, and those built vastly high :
 For when the smiling HEAV'N's serene and clear,
 Or thinly clouded, we no THUNDER hear :
 But now ev'n Sense assures no Smiles adorn,
 255 No SKY's serene, while mighty THUNDER's born :
 But athick CLOUD o'er-spreads Heav'n's threat'ning Face,
 As if the Shades of HELL had left their Place,
 And fill'd the arched SKIES : so thick the NIGHT,
 So dark the horrid CLOUDS, and so affright !
 260 Besides ; at SEA dark CLOUDS do often fall,
 As Streams of flowing PITCH, and spread o'er all,

Far

NOTES.

244. Now how, &c.] In inquiring into the Cause of Thunder it must be observ'd, that it never thunders but when the Sky is over-cast with thick Clouds: For unless the Clouds were thick, and high-built, so great a quantity of Rain or Hail could not fall at the same Time. Therefore in those Clouds you may imagine a Wind agitated and whirl'd about in a turbulent Motion, growing hot with that Motion, and forcing out of the Clouds many Seeds or Atoms of Fire: And that at length the Wind itself takes Fire, either by its own Motion, or by those fiery Particles, and breaks out with a horrid Roar; and that, by that violent Eruption, it so shakes and tears the Parts of the Clouds, that they are all shiver'd into Hail, or dissolv'd into a Shower of Rain. This is contain'd in 51. v.

252. For when, &c.] The same Matter composes Wind, Thunder, Lightning, and Earthquakes, that is to say, a dry Exhalation,

says Aristotle, lib. 2. Meteor. cap. ult. For of this dry Exhalation Wind is made in the Air; Earthquakes within the Earth: Showers, Tempests, Thunder and Lightning in the Clouds.

256. But a thick, &c.] These 4. v. Lucretius has before in Book. IV. v. 172.

260. At Sea, &c.] Sir R. Blackmore's excellent Description of a Storm at Sea, will illustrate this Passage of Lucretius:

Now gath'ring Clouds the Day
 begin to drown ;
 Their threat'ning Fronts thro'
 all th' Horizon frown :
 Their swagging Wombs low in
 the Air depend,
 Which struggling Flames, and
 in-bred Thunder rend :
 The strongest Winds their
 Breath and Vigour prove,
 And thro' the Heav'ns th' un-
 wieldy Tempests shove :
 O'ercharg'd with Stores of Hea-
 v'ns Artillery,
 They groan, and pant, and la-
 bour up the Sky :

Loud

Far from the darken'd Sky ; and, swoln with RAIN,
 And STORMS, they draw behind a dreadful Train
 Of THUNDER-CRACKS, which rage o'er all the MAIN.
 265 Ev'n we on Earth all shake, with Terrour aw'd,
 We seek for Shelter, nor dare peep abroad.
 Therefore these CLOUDS, that spread o'er all the Sky,
 Must needs be thick, and all built vastly high :
 For else they could not stop descending LIGHT,
 270 Nor check the RAYS, and bring so thick a NIGHT ;
 Nor such great FLOODS, nor so much WATER, yield,
 As swell our STREAMS, and spread o'er ev'ry Field.
 These WINDS and FIRES, when spread o'er all the Sky,
 Make THUNDERS roar, and the wing'd LIGHTNING fly.
 275 For I have taught before that CLOUDS contain
 A mighty Store of FIRE, and much they gain
 From the SUN'S Heat, and the descending RAYS,
 These when the WIND has forc'd to narrow Place,
 And squeez'd some Sparkles from the WATRY FRAME,
 280 And closely mixes with the gather'd FLAME,

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Loud Thunder, livid Flames,
 and Stygian Night,
 Compounded Horrors, all the
 Deep affright ;
 Rent Clouds, a Medley of
 Destruction spout ;
 And throw their dreadful En-
 trails round about :
 Tempests of Fire, and Cataracts
 of Rain
 Unnat'ral Friendship make t' af-
 flict the Main :
 This Orb's wide Frame with the
 Convulsion shakes,
 Oft opens in the Storm, and of-
 ten cracks :
 Horror, Amazement and De-
 spair appear
 In all the hideous Forms that
 Mortals fear.

266. Seek for shelter,] Suetonius says of Tiberius, that he was frightened at the Noise of Thunder, that he ran to hide himself in Caves and Cellars.

268. Must needs, &c.] It is therefore evident, that there can

be no Thunder, except in thick and deep-belly'd Clouds, that the Matter that composes it may be included within them : For what Pliny says to the contrary, Catilianis prodigiis Pompeiano ex municipio M. Herennium decurionem tereno die fulmine ictum fuisse : and Horace, who, Carmin. lib. i. speaking of Jupiter, says, that he plerumque per purum tonantes egit equos, volucrumque currum : These Instances, I say, are no farther to be credited, than that Thunder may perhaps have sometimes been heard, and Lightning seen by Persons, over whose Head the Sky was clear : but then some other Part of the Horizon must have been cover'd with Clouds, from which the Thunder and Lightning broke out.

273. These Winds, &c.] The Poet having taught, that Lightning is generated in thick and high-built Clouds ; he now in these 22. v. farther shews, that the

It whirls, and then within the CLOUD retires;
 And, tumbling, forges there, and points, the FIRES:
 This, by the rapid WHIRL, or neighb'ring RAY,
 Is fir'd; for FLAME is rais'd by either Way.
 285 Thus when the WIND, grown hot, still whirls around,
 Or when the furious FLAME breaks o'er the Bound,
 Then THUNDER, fit for Birth, dissolves the CLOUD,
 And shews the glaring FIRES, and roars aloud:
 The HEAV'NS then crack, as if the Orbs would fall,
 290 And feeble FEAR, and Tremblings sieze on all:
 Then SHOW'RS, as if the AIR were chang'd to RAIN,
 Fall swiftly down, and threaten FLOODS again.
 So great the THUNDER-STORMS, as if they came
 From the revengeful CLOUDS to quench the FLAME.
 295 Sometimes external WINDS the CLOUDS divide,
 And break wide CAVERNS in their injur'd Side.

Thro'

NOTES.

the Fires and Winds, contain'd within the Clouds, oft produce Lightning, which is follow'd by a roaring Noise, a Trembling of the Earth, and a violent Shower of Rain. For, first, says he, the Clouds contain many Seeds of Fire: Secondly, the Wind drives and compels those Clouds, as it were, into high Mountains, and by that means squeezes out of the Clouds those Particles of Fire, by whose Contact, or at least by the Violence of its own Motion, the Wind itself is kindled into Flame: Thirdly, when that Wind is thus kindled, the Lightning grown mature, cleaves the Clouds, and glares around in dreadful Flashes: Lastly, the Thunder roars, the Earth trembles, Mortals are siez'd with Consternation and Dismay, and the Rain falls with such Violence, as if the Heavens were descending in the Shower.

287. Then Thunder, &c.] Milton in Paradise Regain'd, B. IV.

— Either Tropick now
 'Gan thunder: at both Ends of
 Heav'n the Clouds

From many a horrid Rift abor-
 tive pour'd
 Fierce Rain, with Lightning
 mix'd; Water with Fire
 In Ruin reconcil'd: Dreadful
 was the Rack
 As Earth and Sky would
 mingle.——

And Sir R. Blackmore:

Heav'ns chrystal Battlements, to
 pieces dash'd,
 In Storms of Hail were down-
 ward hurl'd:
 Loud Thunder roar'd, red
 Lightning flash'd,
 And universal Uproar fill'd the
 World:
 Torrents of Water, Floods of
 Flame
 From Heav'n in fighting Ruins
 came:
 At once the Hills, that to the
 Clouds aspire;
 Were wash'd with Rain, and
 scorched with Fire.

295. Sometimes, &c.] In these
 4. v. he says, that if the Wind,
 that is pent up in the Cloud,
 can not break thro', it may be
 M m m m assisted

Thro' these the infant THUNDER makes its way :
 These WINDS call forth the FLAMES, and they obey.
 And sometimes too a WIND unkindled flies ;
 300 But kindles in its Passage thro' the Skies ;
 Losing some heavy PARTS it us'd to bear,
 Which could not swiftly cut the middle Air ;
 And gath'ring others of convenient FRAME,
 Which join, and fly with them, and raise the FLAME :
 305 As BALLS of LEAD, when shot with mighty Force,
 Their stubborn, their ungentle, PARTS divorce,
 And, soften'd, melt in middle of their Course. }
 Sometimes the FURY of the STROKE may raise
 Quick Sparks of FIRE, and make a mighty Blaze :
 310 For by the Stroke small STREAMS of LIGHT may spring
 Both from the striking, and the injur'd, Thing :
 As from cold FLINT and STEEL bright SPARKS appear ;
 They fly the Blow, and leap to open Air.
 And thus the CLOUDS, if of convenient FRAME,
 315 May well be kindled, and dissolve in FLAME :
 Nor can the WINDS be cold, because they move
 Thro' such vast SPACE, still tumbling from above :
 For, if not kindled by the FLAMES they meet,
 Yet sure they must come warm with mingled HEAT.

The

NOTES.

assisted by other Winds from without : and by whatever Means the Cloud be open'd, the Flame, that is ripe for Birth, will necessarily fall down.

299. And sometimes, &c.] Lucretius adds two other ways, by which Lightning may be caus'd : the first in 9. v. For unkindled Wind, breaking out of a Cloud, may grow hot and take Fire, by the Swiftneſs of its Motion, and the Length of its Course : Nor is this in the least incredible, ſince a Ball of Lead, driven with mighty Force, will melt as it flies. Thus the Poet : and tho' the Instance he brings, might be confirm'd by ſeveral Authorities of the Antient Poets and Historians, yet it ought to be reckon'd among the Fables of Antiquity : Nevertheless no Man

will deny, but that many Things take Fire by the ſwiftneſs of their Motion.

305. As Balls of Lead, &c.] This instance the Poet brought before v. 183. See the Note upon it.

308. Sometimes, &c.] The ſecond in theſe 12. v. If the Wind beat furiously upon any Thing ; the Seeds of Fire may flow together upon the Stroke, as well out of the Wind, as out of the Thing it ſtrikes : Thus the Wind takes Fire, and Lightning is made. But that ſuch a Confluxion of the Seeds of Fire may be made in that manner, is evident from the ſtriking of Flint and Iron : And the Objection of the Winds being cold (tho' even that can by no means be granted, by reaſon of the ſwiftneſs of their Motion) is of

320 The THUNDER's Force comes thus: For, while it lay
 Confin'd in CLOUDS, it strove to break away:
 At last prevails, and flies with mighty Force;
 And hence so great the STRENGTH, so swift the COURSE!
 As mighty WEIGHTS from strong BALISTÆ thrown,
 325 Which break the WALLS, and shake the frighted TOWN,
 Besides; its PARTS are small, and quick the BLOWS,
 And therefore meets with nought that can oppose:
 No Stops can hinder, and no Lets can stay:
 The closest PORES will yield an open Way:
 330 And hence it flies with such a mighty Force;
 And hence so great the STRENGTH, so quick the COURSE.
 Besides; all WEIGHTS by NATURE downward go;
 But when that MOTION is increas'd by BLOW,
 The SWIFTNESS, and the FORCE must needs increase,
 335 And break, whatever dares resist, with Ease.

Lastly;

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of no Weight: for the Nature of Iron is full as cold, yet Fire will sparkle out when we strike it.

320. The Thunder's, &c.] Hitherto he has treated of the Nature and Generation of Thunder; he comes now to argue of its Swiftneſs, and Violence of Stroke; which, ſays he, may be gather'd and explain'd from what has been ſaid already: For Wind, ſhut up in a Cloud, rages and grows hot; ſtruggles on all ſides to get out of its Priſon; and therefore, where it finds a Paſſage, it muſt of neceſſity burſt out with mighty Force and Violence: in 6. v. Beſides, it conſiſts of ſmooth and ſmall Particles, and therefore paſſes thro' the void and empty Paſſages of the Air: in 6. v. Add to this its Weight, and that too very much increas'd by Blows: in 4. v. And laſtly in 8. v. That it falls from a great Diſtance, and therefore every Moment increaſes the Swiftneſs of its Motion: perhaps too it is help'd forward by the Air: And what wonder that a heavy Body, burſting out with Violence out of a cloſe Priſon, and

ſhov'd forward by other Bodies, falls impetuoſly, and daſhes to pieces all it meets in its way?

324. Balistæ] The Balista was a warlike Engine, which the Antients made uſe of in their Wars to ſhoot Darts or Stones: It was call'd Balista from βαλῶν, I caſt.

326. Beſides, &c.] In theſe 6. v. he proves the ſwiftneſs of Lightning, from the tenuity of the Atoms, of which it conſiſts. See B. II. v. 365. where the Poet has already prov'd, that Lightning is compos'd of ſmooth and ſubtile Principles: which is the Reaſon that nothing can withſtand the Violence of its Stroke,

332. Beſides, &c.] In theſe 4. v. the Poet argues for the ſwiftneſs of Lightning, and the violence of its Blow, from the Deſcent that is natural to all heavy Bodies; to which if any external Force be added, they deſcend with yet greater Velocity: But Lightning is a heavy Body; and, falling from above, is impell'd by the Force of the Wind: Therefore it is not ſtrange, that it overturns and tears to pieces whatever oppoſes its Paſſage.

Lastly ; so vast a Space since THUNDERS run,
 Their Swiftness must increase in tumbling down :
 For MOTIONS still increasing run their Race,
 And all by odd Proportions mend their Pace :

Or

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336. Lastly, &c.] In these 8. v. he brings his last Argument for the Celerity and impetuous Force of Lightning, from the great Distance from whence it comes ; and says of it, as Virgil of Fame, that

Mobilitate viget, viresque acquirit eundo, Æn. 4. v. 175.

— Ev'ry moment brings
 New Vigour to her Flight, new
 Pinions to her Wings.

It was antiently observ'd by those who made it their Study to inquire into natural Things, That the Motion of all Moveables is the swifter, the nearer they approach to the Place for which they are design'd : insomuch that they move swiftest of all, when they are almost at their Journeys End. Thus a Stone gives a heavier Blow to a Plate of Brass or Tin, for Example, when it falls upon it from a great Height, than it does, when it drops from a less Distance : according to the variety of which Distance, Experience evinces, that the Effect varies likewise ; and that the descending thing gains a Surplusage of Gravity, tho' not of Weight. This nevertheless is deny'd by Simplicius, in his Comment upon Aristotle de Cœlo, lib. 1. cap. 85. where he derides this Increase of Gravity, and declares it a vain Fiction : But we may ask him, Why that Stone descends ? Is it not by reason of its Weight ? And since nothing is done without Cause, why does it descend swifter this Moment than it did the last ? Its swiftmess must in-

crease either by some external or internal Cause : which last can be only a more intense Gravity : the first, Lucretius ascribes, as we have seen already in the foregoing Argument, to the additional and like Seeds, that the descending Stone meets in its passage, and that help to drive it down with greater Swiftmess. And, according to the Doctrine of Epicurus, a more proper Solution of this Problem can not be given. Others again ascribe it to a certain, I know not what, Quality, that the Medium, through which it passes, imparts to it : and that still presses it more and more : Others impute it to the natural, sympathetical and attractive Power of the Centre ; to which, say they, all heavy Bodies, the nearer they approach, move the swifter : According to which Opinion, which is indeed consonant to many other Experiments in Nature, Cowley sings,

And now the violent Weight of
 eager Love

Did with more haste so near its
 Centre move. David. 3.

And if it can not be deny'd, That the Air, tho' it be light in its own Nature, does nevertheless descend, and insinuate itself into the Pores of the Earth, as compell'd by a certain Necessity so to do, by reason of the Impurity it has contracted, then this Question is easy to solve ; For the descending Stone may be said to be borne through the Air, as a Boat that goes down the River with the Stream : And both of them, the Air as well as the Stone move the swifter

- 340 Or all the SEEDS direct their vi'lent Course,
 And strike one part with their united Force:
 Or else, as thro' the AIR they swiftly rove,
 Meet PARTS which strike, and make them swifter move.
 And when the PORES receive the subtile FIRE,
 345 The FORCE flies thro', the THING remains intire:
 But when it strikes the SUBSTANCE, then the Mass
 Is broken: Thus it melts strong GOLD and BRASS:
 Because its PARTS are thin, and swiftly fly,
 And enter in, and soon dissolve the Tie.
 350 Now SPRING and AUTUMN frequent THUNDERS hear;
 They shake the rising, and the dying Year:
 For WINTER yields not HEAT enough; the WIND
 Flies cold: In SUMMER, CLOUDS are too refin'd:
 But in these middle Quarters all concur;
 355 All Causes join to make the THUNDER roar;
 Because

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swifter when they are near the Centre: For the Air is there more thick and impure; and consequently has a greater Propensity to tend downwards: Besides, when it is arriv'd on the Confines, as, I may say, of it's Journeys End, it is swallow'd up, and ingulph'd as by a certain Violence, and imparts the same Lot to its Companion in the Fall.

340. Or all, &c.] For the Seeds of Thunder, like those of other Things, wander undetermin'd to any certain Place, but being driven by that length of Violence, are determin'd, and mov'd in a direct Line.

344. And when, &c.] But Lightning does not break in Pieces all that it falls upon: for all rare Bodies remain safe and unhurt, because the subtile Fire finds a free Passage thro' their Pores: It dissolves solid Bodies, as Brass, Gold, &c. because it strikes into their solid Corpuscles, and being once enter'd into their Pores, and not finding a Passage out, it disjoins the very Principles, melts

Metals, and reduces Stones into Powder.

350. Now Spring, &c.] In these 22. v. the Poet solves the fourth Question which we propos'd above in the Note on v. 226. and inquires into the Reason, why it thunders more frequently in the Spring and in Autumn, than either in Winter or Summer? [But this must be taken to be meant only of some Countries of Italy] And the reason is, says he, because, since Thunder is of a fiery Nature, and breaks out of thick Clouds, it is then most to be expected, when the Weather is warm, and not altogether free from Cold: For where there is no Heat, 'tis in vain to look for Fire, and where there is too much Heat, it suffers not the Clouds to thicken. But in the Spring, and in Autumn, the Cold and the Heat are blended together: Thence proceed Clouds, Winds, Fire, and at length Tumults and Tempests in the Air, and from them Thunder and Lightning.

Because those Seasons **HEAT** and **COLD** engage ;
 Both necessary Things for **THUNDER**'s Rage ;
 That **PARTS** may disagree, and raise a **WAR**,
 And **FIRES**, and rapid **WHIRLS** disturb the Air.
 360 For, first the **SPRING** within its Limits holds
 The coming **HEATS**, and the retiring **COLDS** :
 And therefore these two **PARTS**, thus opposite,
 When join'd, and mixt, must strive, and fiercely fight.
 But then in **AUTUMN**, **SUMMER**'s Flames retreat,
 365 And coming **WINTER** fights the flying **HEAT**.
 These are the troubled **SEASONS** of the Year ;
 The Times that **ELEMENTS** go forth to War :
 What Wonder then if frequent **THUNDER** flies,
 If frequent **STORMS** disturb the lower Skies ;
 370 Since, fighting, all in doubtful **WARS** engage,
 Here **HEAT** and **FLAMES**, there **COLD** and **WATERS**, rage ?
 And hence we know the **NATURE** of the **FLAME** ;
 And how it works, and whence the **FURY** came :
 But not by reading **THUSCAN** Books inquire
 375 The Gods Design by this **CELESTIAL FIRE** ;
 Observe the moving **FLAME**, and thence presage
 The **KINDNESS** of the Gods, or coming **RAGE** :

Or

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In this Opinion Seneca agrees with Lucretius ; and so too does Pliny, lib. 2. cap. 50. where he reaches, that it never thunders in Winter and Summer, except in as much as *mitiore hyeme, & æstate nimborû, semper quodammodo vernat, vel autumnat* ; in a mild Winter, and in a cloudy Summer, the Weather is neither violently cold, nor violently hot, but partakes in some measure of the middle temperatures of the Spring, or of Autumn. And he strengthens this Argument, by instancing in some Countries, where by reason of the extream Cold, as in Scythia, or of the violent Heat, as in Egypt, it never thunders at all. But of these Matters you may consult P. Gassend. in lib. 10. Laërt. de Meteorolog.

370. Doubtful Wars,] In the Spring, and in Autumn, Heat

and Cold contend for Mastery : In Summer Heat governs, and Cold in Winter.

372. And hence, &c.] Here the Poet insults the College of Augurs and Soothsayers at Rome, who pretended to teach Divination, as if it had been a Science ; This, says he, is to know the Nature of Thunder, &c. a Science not to be met with in your Books, that are made up of nothing but trifling and false Conjectures.

374. Thuscan Books] The Books that treated of Divination were compos'd by the Thuscans, a People of Italy, whom Tages had instructed in that Art : from him these Books were call'd Tagetici ; and Macrobius says they were handed about in his Days. Of this Tages Cicero gives us the following Account. Tages quidam dicitur in agro Tarquinienfi, cum terra araretur, & sulcus

Or if the CLOUDS in lucky QUARTERS swell;
And THUNDER break, and with sad OMEN fell:

And

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fulcus altius esset impressus, extitisse repente, & eum affatus esse, qui arabat. Is autem Tages, ut in libris est Hetruscorum, puerili specie dicitur visus, sed senili fuisse prudentiâ. Ejus aspectu cum obstupuisset bubulcus, clamoremq; majorem cum admiratione edidisset, concursum esse factum, totamque brevi tempore in eum locum Hetruriam convenisse: tum illum plura locutum multis audientibus, qui omnia ejus verba exceperint, literisq; mandaverint: omnem autem orationem fuisse eam, quâ Haruspicina Disciplina contineretur, eam postea crevisse rebus novis cognoscendis, & ad eadem illa principia referendis. Lib. 2. de Divinatione. As they were ploughing in the Tarquinian Field, and the Share striking deep into the Ground, one Tages is said to have started on a suddain out of the Earth, and to speak to the Ploughman: This Tages, as we find in the Tuscan Books, is said to have had the Look of a Boy; but the Prudence and Wisdom of old Age. The Peasant dismay'd at the Apparition, cry'd out aloud, and People flock'd about him, insomuch that in a little time the whole Countrey of Etruria were got together in that Place: Then Tages spoke a great deal in the Hearing of many Persons, who writ down all his Words: The Subject of his Discourse was only the Doctrine of Divination: which afterwards got footing in the World by new Additions of Knowledge, built on the Principles he had taught them: Ovid. Metam. lib. 15. v. 553.

— Cum Tyrrhenus arator
Fatalem glebam mediis aspexit in
arvis,

Sponte suâ primum, nulloque agitante, moveri:

Sumere mox hominis, terræque amittere formam;

Oraque venturis aperire recentia fatis:

Indigenæ dixere Tagen, qui primus Etruscum

Edocuit gentem casus aperire futuros.

See likewise Lucan, lib. 1. v. 530, 587, 606.

379. Omen] This Word, as we find in some Authours, seems not to have had originally so extensive a Signification, as we generally give it. Festus explains it, Omen quasi Orimen, quod ore fiat augurium: Now Auguries were drawn either from Tokens given by the Gods, or by Men: and those given by Men were properly call'd Omens. Cicero says, That the Pythagoreans did not only observe the Voices of the Gods, but of Men likewise, which last they call'd Omens: Neque solum Deum voces Pythagorei observabant; sed etiam hominum, quæ omina vocabant, says he, in lib. 1. de Divinat. Apuleius de Deo Socr. says: Ita est apud Platonem; ne quisquam arbitretur, omina eum vulgo loquentium captasse: And soon after he adds; Videmus plerisque usu venire, qui nimia ominum superstitione non semper suoapte corde, sed alterius verbo reguntur: Yet other Authours restrain not the signification of this Word to the Voice, or Utterance of the Mouth only, but extend it to all the Actions of Life; making it to signify the same with the σύμβολα of the Greeks, who by that Word understood the foreboding Signs or Tokens of prosperous or prosperous Events: Thus, to begin with

380 And hence we know, how its quick Forces pass
Thro' closest STONES, and melt, or break, the Mass :
What

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with Cæsar, we read that Augustus, contrary to his Custom, had put on his left Shoo first, the Day that he narrowly escap'd being kill'd in a Mutiny of the Soldiers : And Lampridius recounts among the Signs of Alexander's future Empire, That the Picture of the Emperour Trajanus, which hung over his Father Philip's genial Bed, fell down upon it, while his Mother was in Labour of him in the Temple : And this Omen Festus and other Authours call *caducum auspicium*. Spartianus, in the Life of Hadrian, says, that while he was speaking in Praise of Antonius, a *Prætecta*, [a Gown worn by the Children of Noblemen] dropt down of its own Accord, and cover'd his Head ; and that a Ring on which his Figure was ingrav'd, fell off his Finger, of its own Accord likewise : Ovid too believ'd in Omens, when he said,

*Omina sunt aliquid : modo, cum
decedere vellet,
Ad limen digitos restitit icta
Nape.*

Pliny too speaks of these Remora's, these Obstacles, and hindring Omens, which he calls *offensiones pedum* ; & Plautus, *auspicia & religionem* : *Ante auspicium commoratum est* : In Amphit. And in another Place : *An religio tibi objecta ?* Of like Nature is that, which was offer'd to Otho, going against Vitellius ; when some advis'd him to defer the Expedition, because the Bucklers were not all ready. This Tacitus relates in these Words : *Fuere qui proficiscenti Othoni moras religionemque non conditorum ancilium afferrent.* See Suetonius likewise in the Life

of Nero, cap. 19. And Tibullus elegantly of these Stumblings ;

*O quoties ingressus iter mihi tristitia dixi
Offensum in portâ signa dedisse pedem !*

And such were the Omens they regarded in going to a Place : but they likewise drew Auguries from Accidents at their Departure ; as if any one who went with an Intention to go to a certain Place, return'd on a suddain unexpectedly, and without executing his Design : but this took place chiefly in Sacrifices. Apollonius concerning the Ceremonies of the Goddess Trivia, or Diana is thus render'd :

*————— Sacrisque peractis
Rursus abire pyra moneo : convertere nullus
Te retro strepitusque pedum, fremitusque caninus
Cogat ; nam sacri fiat labor irritus omnis.*

where he seems to imply, that the solemn Mysteries were render'd of no Effect by a Noise, or any other Interruption. Valerius Max. lib. 3. cap. 5. *Nesacrificium Alexandri aut concussio thuribulo, aut edito gemitu impediret* : But this was chiefly observ'd in sacred Rites ; yet Pythagoras gave the like Precaution by a perpetual Symbol : *βαδίζοντας εἰς ἀνάμνησιν μὴ μελᾶσπέπεδον*. Of which he adds the Reason : For the Furies are passing along. And of greater Moment, but not unlike this, is the Admonishment of the Authour of human Salvation : *Qui aratro manum applicuit, ne respiciat* : Moreover, as they nam'd these Omens,

What drives swift **LIGHTNING** on, what makes it flow,
And all the Harm **CELESTIAL FLAMES** can do.

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Omens, religionem objectam, so on the other Hand we learn from Plautus, that when they had a Mind to give a favourable interpretation to an Omen, they call'd it, religionem à se rejicere, and the Greeks, ὑπο-
πόμπην. This might be confirm'd by many Examples; but we have one illustrious indeed in the Person of Julius Cæsar, who, at his landing in Africa, as he leap'd ashore, happen'd to fall down, and to avert the unlucky Omen of that Accident, cry'd out, I have thee, Africa. Suetonius: Cum Cæsar Africæ oram appulisset, & in terram insulturus corruisset, dixit, ut infustum ex casu omen averteret, Teneo te Africa. And the same Cæsar always discover'd an undaunted Greatness of Soul, and his Mind was so much superiour to these Superstitions, that we nowhere read that any Omen whatever could deter him from any Enterprize, or make him delay the Execution of any Design he had resolv'd to attempt. The same Suetonius tells us, that tho' the Victim had escap'd from the Altar, he would not put off his Expedition against Scipio and Juba. Licet, says he, immolanti aufugisset hostia, protectionem adversus Scipionem & Jubam non distulit. To which Seneca alludes in Consolat. ad Marciam, where he says, tam cito dolorem vicit, quam omnia solebat. Moreover: The left Parts of the Body, as the left Hand, the left Foot, &c. are in many Authours, esteem'd unlucky: but, on the contrary, Apuleius represents them as Omens of good Success: and speaking of the left Hand, says: Quartus æquitatis ostendebat indici-

um, deformatam manum finistram porrecta palmula; quæ genuina pigritia, nulla calliditate, nulla solertia prædita, videbatur æquitati magis aptior quam dextera. And Macrobius in Saturnal. lib. 1. cap. 9. Ideo Apollinis simulacra manu dextra Gratias portant, arcum cum sagittis finistram; quod ad noxam sit pigrior, & salutem manus promptior largiatur: Which the following Passage of Catullus at once illustrates and explains:

Hæc ut dixit, Amor sinistra amanti
Dextram sternuit approbationem.

After which he adds:

Nunc ab auspicio bono profecti,
Mutuis animis amant, amantur.

But these Omens properly relate to the Actions of human Life: And the Antients had besides some more occult and secret Omens, which they took from Things, from Days, from Names, and even from Places and Cloaths: To Things seem to relate the Omens that were taken to be unlucky, as Shipwrecks, and the Remains of them: and those Things chiefly which from some unfortunate Accidents have given Rise to Proverbs; as Aurum Tolosanum, and Equus Sejanus: which, because they are so well known, I purposely forbear to explain: But I can not omit a remarkable Passage in Virgil, which makes much to our Purpose, and which that Poet, who was deeply read in the Augural and Pythagorean

Doctrine, has secretly veil'd with this Superstition. For to avoid openly to assert, that those Gifts of Æneas to Dido, as being sav'd from the Destruction of Troy, were unlucky to her, he has insinuated that they were so by a Circumlocution, in the following Verses :

Munera præterea Iliacis erepta
ruinis
Ferre jubet, pallam signis auro-
que rigentem,
Ornatus Argivæ Helenæ, quos
illa Mycenis,
Pergama cum peteret, inconces-
sosque Hymenæos,
Extulerat, Ledaæ matris mirabi-
le donum. *Æn. i. v. 651.*

And soon after ; v. 683.

Dona ferens pelago, & flammis
restantia Trojæ.

This Statius understood, and has imitated lib. 2. Thebaid.

Nec mirum : nam tu infaustos,
donante marito,
Ornatus Argiva geris, dirumque
monile
Hermiones. Longa est series, sed
nota malorum
Persequar, unde novis tam sæva
potentia donis.

The Beltof Pallas too strengthens this Opinion : For Æneas would have spar'd the Life of the prostrate Turnus, had not that unlucky Token, which Turnus had taken from the slain Pallas, call'd afresh to his Remembrance, and renew'd his Grief for, the Loss of his dearest Friend :

————— Stetit acer in armis
Æneas, volvens oculos, dextram-
que repressit :
Et jam jamque magis cunctan-
tem flectere sermo
Cœperat ; infelix humero cum
apparuit ingens

Balteus, & notis fulserunt cingu-
la bullis
Pallantis pueri, victum quem vul-
nere Turnus
Straverat, atque humeris inimi-
cum Insigne gerebat.
Ille oculis postquam sævi monu-
menta doloris,
Exuviasque haufit ; furiis accen-
sus, & ira
Terribilis : Tune hic spoliis in-
dute meorum
Eripiare mihi ? Pallas te hoc vul-
nere, Pallas
Immolat, & pœnam scelerato ex
sanguine sumit.

And Homer, in like manner, describes Achilles swelling with Rage and Fury, at sight of the Arms that Hector had taken from Patroclus. As to the Days, such as were noted for any Overthrow in Battel, or any the like unfortunate Event, were call'd religious, nefasti, and atri : of all which see Agellius, lib. 1. cap. 18. who there fully handles this Matter : To which I will only add this Passage out of Tacitus, lib. 2. Histor. Funesti ominis loco acceptum est, quod maximum Pontificatum adeptus Vetellius de Ceremoniis XV. Cal. Aug. edixisset, antiquitus infausto die Cremerensi Alliensiq; cladibus. Of Names, some were Omens of Prosperity and Diuturnity ; others, of the contrary : Crassus, Valerius, Macrobius, Lucius, Lucris, were Names foreboded Good. Plautus in Pers. Luc. Nomen atque Omen quantivis est pretii. Dor. Si te eam mihi quoque Lucridem confido fore re. Furius, Hostilius, Macer, were ill Names. Martial. lib. 5. Epigram. 22.

Quinctum pro Decimo, pro Cras-
so, Regule, Macrum
Ante salutabat Rhetor Apol-
lonius.

See likewise Festus in Lacu Lu-
crino. Nor may we omit Aul.
Gellius, who Lib. 1. cap. 28.
says :

For if these BOLTS were thrown by Gods above,
385 Or if they were the proper Arms of JOVE ;

Why

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says : Cavenda igitur non improprietas sola verbi, sed etiam pravitas animi, si quis se nunc senior Advocatus adolescenti superare dicat. Places were held to be ominous, either from their Names, or for their having been polluted with dead Bodies, or otherwise : Plautus in Menæchm. had regard to the Name : Ne mihi Damnum in Epidamno duas. And Petronius : Epidamni Nomina quære. As to any Thing that foreboded ill in the Places themselves, we find a remarkable Testimony in Tacitus, Annal. lib. 1. where Germanicus purges by Sacrifices the Places where Varus had encamp'd with his whole Army : Quid Tiberio, says he, haud probatum, seu cuncta Germanici in deterius trahenti, sine exercitum imagine caesorum insepultorumque tardatum ad prælia, & formidolosiorum hostium credebat. Neque Imperatorem auguratis & vetustissimis Cæremoniis prædium attrectare feralia debuisse. Of Cloaths or Garments we have an Instance in Q. Curtius, who believ'd them ominous, and even to portend the Change of Empire in Alexander, inasmuch as he affected and took delight to wear a foreign, or Persian Dress : To which the judicious Tertullian seems to allude : Vides, says he, quasdam & capillum croco vertere : Pudet eas etiam nationis suæ, quod non Germania aut Gallia procreatæ sint. Ita patriam capillo transferunt. Male ac pessime sibi auspicantur flammeo capite. Where by flammeo capite, he means that perpetual Fire, which in another Place he calls ignem jugem. St. Jerome in like manner. Ne caput gemmis oneres, nec capillum irrufes, & ei

aliquid de Gehennæ ignibus aspiceris. This Passage is in the Epistle to Læta, and no doubt copy'd after Tertullian, as many other Passages in that Father are.

384. For if, &c.] Here the Poet takes away the Thunder from Jupiter, and the other Gods, who seem to him not to imploy it so prudently as it were to be wish'd they did : and at the same time he overthrows the whole Doctrine of the Thuscans : For, if it be not the Gods who dart the Thunder, there can be no Divination by Thunder : And if they do, why do they let the Wicked escape, and often destroy the Innocent ? What does it avail the Thunderer, to launch his Bolts upon uninhabited Desarts ? What, when he throws his unerring Shafts into the middle of the Sea ? Or upon the bare Tops of Mountains, which he does very often ? And lastly, why is there no Thunder without Clouds ? Why does he strike down his own Temples, and those of his Under-Gods ? All this the Poet has included in 47. v. in which there are many Things spoken satirically, and many by way of Derision.

Gods above] For the Thuscan Books taught, that Jupiter gave leave to nine Gods to dart Thunder down upon the Earth. Plin. lib. 2. cap. 52. Arnobius, p. 122. Diis novem Jupiter potestatem jaciendi sui fulminis permisit.

385. The proper Arms of Jove ;] Why Jupiter is said to be the Author of Thunder and Lightning. Pliny, lib. 2. cap. 20. gives this Physical Reason : The Fires of the three highest Planets, says he, falling to the Earth, bear the Name of Lightning : but chiefly that of the three, which is plac'd

Why do the daring WICKED still provoke,
 Why still sin on, secure from THUNDER's Stroke?
 Why are not such shot thro', and plac'd on high,
 As sad Examples of Impiety,
 390 That Men may sin no more, no more desie?

And

NOTES.

between the two others, that is to say, of Jupiter: because, participating of the excessive Cold and Moisture of the Circle of Saturn, which is above him, and of the immoderate Heat of Mars, that is next under him, he, by that means, discharges the Superfluity of either: And hence it is commonly said, That Jupiter is the Darter of Lightning. But Seneca, much better than our Poet, and with more Analogy to Truth, takes not away the Thunder from Jupiter, when he says, that Jupiter indeed is not the Darter of Thunder: but all Things are order'd in such a manner, that even the Things, that are not made by him, are not made without Cause and Reason, which are his: The Force and Power of them is his Permission: For tho' he makethem not now himself, he was the Cause, that they are made: *Interim hoc dico, fulmina non mitti à Jove, sed sic omnia disposita, ut etiam ea, quæ ab illo non fiunt, sine ratione non fiunt, quæ illius est: Vis eorum illius permissio est: nam etsi Jupiter illa nunc non facit, fecit ut fierent; singulis non adest, sed signum, & vim, & causam dedit omnibus.* Thus Seneca in lib. 2. Nat. Quæst. 48. who is mistaken only in the true Name of the first Divine Cause. Horace;

*Tu parum castis inimica mittes
 Fulmina lucis.*

And according to the Doctrine of the Tagetick Books, nothing was ever blasted with Fire from Heaven, but what had before

been stain'd with some Pollution.

386. Why do, &c.] Seneca proposes this Question in a few Words: *Quare Jupiter, aut ferienda tranfit, aut innoxia ferit?* And the last Exceptions, which Lucretius brings against Providence, are drawn from that common Observation; Good Men are oppress'd with Trouble, and Misery, subject to all the Rage and Violence of the Wicked; whilst the Impious swell with the Glories, and revel in the Delights of Life: This has been the Subject of many solicitous Disquisitions: Disputes have been multiplied; and some have been as industrious to vindicate the Methods of Providence from all seeming Irregularities, as others to defame them. Some have sent us to look for Retribution in another World, and indeed this is an easie way of solving the Difficulty, and with little Pains deducible from the immortality of the Soul, which I have already asserted. But because to look beyond the Grave, requires a sharp and steady Eye, I shall observe the Reasons of the Philosophers, and propose what Plutarch has excellently deliver'd. And here we must take notice, that only that part of the Objection, which concerns the prosperity and impunity of the Wicked, seems formidable, and concluding; for all those Men we generally call Good, as their own Conscience will tell them, deserve those Afflictions which the most miserable have endur'd. And upon this the Poets, Orators, and Historians have been very copious.

Tolmæ

And why does heedless LIGHTNING blast the Good,
And break his Bones, or cruddle all his Blood?

Why

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Τολμῶ καλεπεῖν μήποτ' ἐκ εἰσὶν
θεοί.

Κακοὶ γὰρ εὐτυχῆντες ἐπιπλήττω-
σί με.

I dare to say no Gods direct this
Whole,
For Villains prosperous distract
my Soul.

says Aristophanes: and Diago-
ras resolved to be an Atheist, as
Empiricus delivers, because he
did not see Vengeance fall pre-
sently on the perjur'd Person,
and consume him; Velleius Pater-
culus produces the long and
quiet Reign of Orestes, as a con-
vincing Proof, that the Gods di-
rected him to murder Pyrrhus;
and approv'd the Action: and
Martial has contracted all the
Force of the Argument into one
Epigram.

Nullos esse Deos, inane Cœlum
Affirmat Silius, probatq; quod se
Facium, dum negat hæc, videt
beatum.

Seneca in his Treatise, *Cur
Malis benè & Bonis malè*, cum
sit Providentia, talks much of
the Privilege of Sufferings, that
to afflict argues Care, and Kind-
ness; and, in short, thinks this a
great Commendation of Vertue,

Τῆς δ' ἀρετῆς ἰδρωτὰ θεοὶ δεγ-
πάροισιν ἐδῆκαν

Ἀθάνατοι—

Th' Immortal Pow'rs have Sweat
near Virtue plac'd.

But this is not the way to an-
swer the Demands of an Epicu-
rean, to satisfy his Doubts, who
had rather be accounted a happy
Servant, than a miserable Son of

the Deity, who would not be
fond of Torments, that he might
show *spectaculum Jove dignum*,
virum fortem cum malâ fortunâ
compositum: who cannot think
that Fears and Jealousies are the
necessary Products of irreligious
Opinions; but makes such the
only Means of obtaining Happi-
ness, and perfect Serenity of Mind:
who is most delighted with the
most pleasing Physick, and would
think him cruel, who makes use of
Saws and Lances, when a gentle
Cordial would restore the Patient
to his Health; we must therefore
look for other Answers, and Plu-
tarch presents us with enough,
some of which have a peculiar
Force against the Epicureans;
who confess Man to be a free A-
gent, and capable to be wrought
on by Example and Precept.

First then, Quick Vengeance
does not blast the Wicked, that
they themselves might learn Le-
nity, and not be greedy to re-
venge Injuries on others: τὸ τέλος
τῶν ἀγαθῶν τὸ ὁμοιοῦναι θεῷ.
'tis the end of good Men to be like
God, says Plato; and Hierocles
places the Life of the Soul in this
Imitation: Here God sets forth
himself an Example, and any
noble and generous Mind would
rejoyce to have the Most Excel-
lent for a Pattern of his Actions:
Lucretius follow'd Epicurus, be-
cause he thought him so, and the
rest of his Admirers make his
fancy'd Virtues the Ground of
their Respect. This, taken by it-
self, I confess, is but a weak An-
swer, since one Thunder-bolt
would secure them from doing
Mischief, whilst Mercy and For-
bearance often exasperate; and,
because God holds his Tongue,
they think he is even such a one as
themselves: but if we consider it

Why GOOD and PIOUS MEN these BOLTS endure?
And VILLAINS live, and see their Fall secure?

Why

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as a Consequent of another Reason, that is drawn from the Goodness and Kindness of the Deity, then it proves strong, and satisfactory.

The second Reason follows: God doth not presently punish wicked Men, that they may have time to become better; and here Plutarch brings Examples of such, whose Age was as glorious as their Youth infamous: if Miltiades, says he, had been destroy'd, whilst he acted the part of a Tyrant; if Cimon in his Incest, or Themistocles in his Debaucheries, what had become of Marathon, Erymedon and Dianium, what of the Glory and Liberty of the Athenians? for as the same Author observes, εἴθεν αἱ μεγάλα φύσεις μικρὸν ἐκφέρουσι, εἰ δ' ἀργαῖ δι' ὀξύτητά το σφοδρὸν ἐν αὐταῖς, ἢ δραστικόν, ἀπ' ἐν σάλας ἀκροφύργου πρὸς εἰς τὸ μόνιμον, καὶ καθεσπικὸς ἢ δὲ ἐλθεῖν. great Spirits do nothing mean, the active Principles that compose them will not let them lie lazily at rest, but toss them as in a Tempest, before they can come to a steady and settled Temper.

Thirdly, the wicked are sometimes spar'd to be Scourges to others, and execute just Judgment on Men of their own Principles: this is the Case of Tyrants and outrageous Conquerors; such was Phalaris to the Agrigentines, such Pompey and Cæsar to the Romans, when Victory had made them swell beyond their due Bounds; and Pride and Luxury fled from other Countries upon the Wings of their Triumphant Eagles: Such Alexander to the Persian softness, and, if we look abroad, ten thousand Instances occur, and press upon us; Cedre-

nus, Pag. 334. tells us, that when a Monk enquir'd of God, why he suffer'd cruel Phocas, treacherous to his Emperour Mauritius, and an implacable Enemy of the Christians, to obtain the Empire, and enjoy Power as large as his Malice? a Voice, ἀοράτως, gave this Answer to his Demand, χείρονα ἔκ εὖρον πρὸς τὴν κακίαν τῶν καλοικέντων ἐν τῇ πόλει. because I could find none worse to scourge the wickedness of the Citizens: and Alaricus declar'd, ἔκ ἐθελοντίης τὰ ἐκεί πορεύμαι, ἀλλὰ τις καθ' ἐκάστην ὀχλή μοι βασανίζων, ἢ λέγων, Ἀπιδι τῶν Ρωμαίων πόρθησον πόλιν. 'tis not of my own accord that I attempt this, but something will not let me rest, but urges me on, and cries, Go sack Rome: and this requires, that they should not be only free from Punishment, but likewise enjoy Wealth, and Power, and all the Opportunities and Instruments of Mischief: and this Answer is equal to the Objection in its greatest latitude, and gives Satisfaction to all those numerous little Doubts, which lie in the great Objection, as it was proposed.

Fourthly, The impious are not presently consum'd, that the Method of Providence may be more remarkable in their Punishment. The History of Bessus and Ariobarzanes in Curtius is an excellent Instance of this; and amongst others, Plutarch gives us a memorable one of Bessus, who, having kill'd his Father, and a long time conceal'd it, went one Night to Supper to some Friends; whilst he was there, with his Spear he pull'd down a Swallows Nest, and kill'd the young Ones, and the Reason of such a strange Action

- 395 Why do they throw them o'er a desert PLAIN,
 Why thro' the empty Woods, and toil in vain ?
 Is it to try their STRENGTH ? or else in PLAY
 The WANTONS sport, and throw Jove's Bolts away ?
 Or why, the senseless Rocks, they idly wound ?
 400 Why blunt their FATHER's Bolts against the Ground ?
 Why does he suffer this ? why not prepare,
 And keep his useful ARMS for Times of WAR ?
 Lest some GIGANTICK, impious REBELS rise,
 And unprovided he should lose the SKIES.
 405 Why when the HEAV'N is clear, no THUNDER flies ?
 What, when thick heavy CLOUDS o'erspread the SKIES ?
 Does

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Action being demanded by the Guests, his Answer was, *εἰ δὲ μὲν πάλαι καλαμαρτυροῦσιν αὐτοὺς ψεῦδος, ἢ καλαβοῶσιν ὡς ἀπεκτενόντες τὸ πάρος;* do not they bear false Witness against me, and cry out, that I kill'd my Father ? Which being taken notice of, and discover'd to the Magistrate, the Truth appear'd, and he was executed.

A great many other Reasons are usually mention'd, but these are the principal, and suppose the Liberty of the Will ; for if a Man follow Fate blindly, he is driven on, not perswaded to act : if he be an Automaton, and move by Wheels and Springs, bound with the Chain of Destiny, 'tis evident that Fate is the Cause of all his Miscarriages, and the Man no more to be blamed for wicked Actions, than a Clock for irregular Strikings, when the Artist designs it should do so. No Example can prevail on him, no Promises entice, no Threatnings afright him ; being as unfit to rule himself, or determine his own Actions, as a Stone in its descent ; and a piece of Iron may be said to act as freely as a Man, if he be led on by Fate, and its Motion as spontaneous, if Liberty consisted in a bare Absence of Impediments.

395. Why do, &c.] In these 10. v. he argues, secondly, That Thunder is the Effect of natural Causes, and not made by the Gods : for if it were, they would not be so lavish of their Bolts, as to throw them into solitary Deserts : Had not Jupiter better keep them in store to destroy his Enemies, in time of Need ?

405. Why when, &c.] The Poet in these 8. v. argues, thirdly, That Thunder comes not by the Will of the Gods, but is made by the Laws of Nature : for otherwise, why does it never come without Clouds and Noise ? Why does it fall alike upon the Seas and Earth ? What Crime have the Waters been guilty of, that they are thus punish'd ?

The Heav'n is clear,] To what has been said of this already in the Note on v. 68. and the Example we gave v. 268. in the Person of M. Herennius, the Decurion, who was kill'd by Thunder in a clear Day, we add this of Lucan. lib. 1.

Emicuit cælo tacitum sine nubibus ullis
 Fulmen.

And this Distich, which we find in Tully, de Divinat.

Aut

Does he descend to take the surer Aim,
 At nearer distance then, and dart the FLAME? (these?
 Why strike the FLOODS? What mean such BOLTS as
 410 Is it to check the Fury of the SEAS?
 Poor weak Design! The troubled WATERS roar,
 And, vex'd by whirling FLAMES, still rage the more.
 Besides: this Jove is willing Men shou'd fly
 These BOLTS, or not: if willing, tell me why
 415 The THUNDER is too SUBTILE for our Eye?
 If not; why does he show the threat'ning LIGHT?
 And why o'erspread the Heav'ns with CLOUDS and
 NIGHT?
 And make a NOISE, and give us Time for FLIGHT?
 Besides: how can these FLAMES at once be thrown
 420 To diff'rent Parts? Or is it never done?
 Does Jove at once but throw a single one?

Fond

NOTES.

Aut cum terribili percussus ful-
 mine civis
 Luce serenanti vitalia lumina li-
 quit.

For they held that Thunder, in a clear and unclouded Sky, was an evincing Proof of a Deity, and a certain Presage of some extraordinary Event: Cicero, in great Indignation against the Atheists of his Days, and speaking of this Accident, cries out: *Negemus omnia, comburamus annales, ficta hæc esse dicamus; quidvis denique potius, quam Deos res humanas curare, fateamur?* Lib. de Divinat.

409. Why strike, &c.] Why does he throw his Bolts on any Thing that is not guilty of some Crime? Thus Cicero, lib. 2. de Divinatione. *Quid enim proficit, cum in medium mare fulmen jacet Jupiter? Quid cum in altissimos montes? Quod plerumque fit. Quid cum in desertas solitudines? Quid cum in earum gentium oras, in quibus hæc ne observantur quidem?* And to the same purpose Aristophanes, Νεφέλα. If Jupiter's Bolts,

says he, are aim'd against the perjur'd, how comes it to pass, that neither Simon, Cleonymus, nor Theodorus are blasted by that celestial Flame? They, who are perjur'd with a Witness! Why does his own Temple, why does Sunion, the Promontory of Attica, and why do mighty Oaks, rather feel the Effect of the Fire? No doubt, because they are all perjur'd.

413. Besides, &c.] In these 6. v. he, by way of dilemma, proposes two other wonderful Arguments to deprive Jupiter of his Thunder. Either he would have us avoid his Bolts, or he would not: If he would, why is his Thunder so subtle, and so swift, that we can not perceive it coming, and get out of its way? And if he would not, why does he give us notice before hand of its coming, by overcasting the Air with gloomy Clouds, by the grumbling of his Thunder? &c.

419. Besides, &c.] In these 5. v. he argues sixthly, That Thunder must be the Effect of Nature, since it thunders in several Places at the same time: a Task too laborious

Fond Fancy ! For, as RAIN, so LIGHTNING, flies
To many Parts at once, and breaks the Skies.

Nay more : Why does he beat the TEMPLES down,
425 Those of his FELLOW-GODS, and of his own ?
Why does he hurt, and break the sacred STONE ?
Why break the curious STATUE, spoil the Grace,
And wound with fiery BOLTS the sacred FACE ?

Why does he seldom strike the humble PLAIN,
430 But blunt his FIRES on HILLS and ROCKS in vain ?

And

N O T E S.

laborious for any one Jupiter. But let us hear Seneca delivering the Opinion of the Antients upon this Matter : They did not believe, says he, that a Jupiter, like him we worship in the Capitol, darted his Thunders with his Hand : but they meant the Mind and Spirit, who is the Maker, Lord and Ruler of this Mundane System, to whom every Name agrees : The Thuscans too therefore held that Thunder is sent by Jupiter, because nothing is done without him. *Ne hoc quidem crediderunt, Jovem, qualem in Capitolio, & in cæteris ædibus colimus, mittere manu fulmina ; sed eundem, quem nos Jovem, intelligunt, custodem rectoremque universi, animum, ac spiritum, mundani hujus operis dominum, & artificem, cui nomen omne convenit. Idem Etruscis quoque visum est : & ideo fulmina à Jove mitti dixerunt, quia sine illo nihil geritur.* L. 2. Q. 45.

424. Nay more, &c.] In these 7. v. he argues seventhly to this Purpose : If Thunder were directed by the Will of the Gods, is it credible they would beat down their own stately Temples ? Would they dash to pieces such elaborate Statues, the very Master-pieces of Polycletes ? A poor mean-spirited Revenge ! The Poet speaks this by way of Ridicule.

429. Why does, &c.] In these two Verses he argues eighthly : That it is but reasonable to be-

lieve, that Thunder is produc'd by natural Causes, since for the most Part it falls on the highest Mountains. Dost thou not see, says Artabanus, the Unkle of Xerxes, that God strikes with his Lightning the largest Animals nor suffers them to grow insolent, and that he leaves the less unhurt ; Dost thou not see that his fiery Darts always throw down the most lofty Edifices, and the tallest Trees ? For God takes delight to depress and humble the haughty. Herodotus, lib. 6. And Horace agrees with Lucretius

—————Feriant altos
Fulmina montes :

Of which Seneca gives a Physical Reason, and says ; That the Tops of the Mountains, being opposite to the Clouds, are expos'd to stand the Brunt of every Thing that falls from Heaven ; so that they intercept the Lightning in its Course.

Thus Lucretius concludes his Disputation concerning this amazing Meteor ; which made no small Part of the Religion of the Antient Romans, whose many superstitious Opinions, concerning Thunder and Lightning will not improperly find a Place here ; and therefore I promise my self, that the Reader will not be displeas'd to see them at one view, as I find them collected by Nardius, p. 452. in his 27th accurate Animadversion on Lucretius.

O O O O

T H E

THE
 Superstitious Opinions
 OF THE
 ANTIENTS
 CONCERNING
 Lightning and Thunder.



THE Romans deriv'd these superstitious Opinions from the Thuscans, and, soon imbibing the Precepts of this new Religion, they committed them to the Care of certain Priests: who nevertheless, dismay'd at the Enormity of some Lightnings, did, at the general Request of the People, repair to the Thuscan Augurs, from whom they had their first Instructions, to be inform'd what those dreadful Sheets of Flame, and Bursts of horrid Thunder portended: For the Thuscans, as Diodorus Siculus, lib. 6. cap. 9. witnesses of them, having imploy'd much Time in searching into the Causes of natural Events, and in the Study of Theology, were of all Men the most knowing in the Interpretation of Lightning: insomuch, says he, that, even to this Day, almost the whole World admire their depth of Science, and apply to them to be instructed in the Art of interpreting that celestial Fire. Verrius, the Grammarian, relates, that these Thuscan Diviners were sent for to Rome, and, being disaffected to the Romans, wilfully order'd undue Sacrifices, and such as were displeasing to the Gods: and that, by their treacherous Advice, the People of Rome were prevail'd on unfortunately to remove the famous Statue of
 Horatius

Horatius Cochles to a certain Place, where, being surrounded by highbuilt Houses, the Sun might never shine upon it: but, their Treachery being discover'd, they were accus'd before the People, and, being convicted of the Perfidy, were put to Death: And upon this Occasion was made this senary Verse,

Malum consilium consultori pessimum est,

which was sung about by the Boys in all the Streets of Rome. This Accident of the Thuscan Augurs increas'd the Credit of the Books of the Sybils, which, according to Servius on *Æn.* 6. were kept in the Temple of Apollo, as well as of those of the Marsians, and of the Nymph Bygois, who had writ the Art of Divination, as practis'd by the Thuscans.

We have already spoken in the foregoing Notes of the Matter, of which the Antients held Lightning to consist, and of the manner of its Generation, which 'tis needless to repeat in this Place: we likewise have said already, that the Latines often confounded fulgur and fulmen: and how they came to do so, Festus teaches in these Words: Fulgere Prisci pro ferire dicebant, unde fulgur dictum est; fulguratum id, quod est fulmine ictum. And they believ'd there was no other difference between them, than only that of more or less, which among Logicians makes no difference whatever of the Species: And we find a remarkable Passage in Seneca, who, after an accurate Disputation, concludes, by determining the Difference between fulgur and fulmen, as follows: Ergo, says he, & utramque rem ignem esse constat, & utramque rem inter se meando distare. Fulguratio est fulmen non in terras usque perlatum & rursus licet dicas, fulmen esse fulgurationem usque in terras perductam. Non ad exercendum verba hæc diutius pertracto, sed ut ista cognata esse, & ejusdem notæ, ac naturæ probem. Fulmen est quiddam plus, quam fulguratio: vertamus istud; fulguratio est pene fulmen. *Nat. Quæst. lib. 2. cap. 21.* And in *Quæst. 57.* of the same Book: Et, ut breviter dicam, says he, quod sentio, fulmen est fulgur intentum: And lib. citat. *Quæst. 16.* Quid ergo inter fulgurationem & fulmen interest? Dicam: Fulguratio est late ignis explicitus: Fulmen est coactus ignis, & impetu factus.

The Poets, according to their Custom, shadow'd the Nature of either Fire under the Veil of Fables, which nevertheless Servius accurately explains, upon the following Passage of Virgil, which I am oblig'd to transcribe at length, for the better Understanding of what follows :

Insula Sicaniam juxta latus Æoliumque
 Erigitur Laparen, fumantibus ardua saxis.
 Quam subter specus, & Cyclopum exesa caminis
 Antra Ætnæa tonant, validique incudibus ictus
 Auditi referunt gemitum, striduntque cavernis
 Stricturæ chalybum, & fornacibus ignis anhelat:
 Vulcani domus & Vulcania nomine tellus.

Æn. 8. v. 416.

Which is thus render'd by Dryden:

Sacred to Vulcan's Name, an Isle does lie
 Between Sicilia's Coast and Lipare;
 Rais'd high on smoking Rocks; and deep below
 In hollow Caves the Fires of Ætna glow.
 The Cyclops here their heavy Hammers deal:
 Loud Strokes and Hissings of tormented Steel
 Are heard around: the boiling Waters roar,
 And smoking Flames thro' fuming Tunnels soar.

This Passage of Virgil is explain'd by Servius, as follows: By Vulcan, says he, is meant Fire, which is call'd Vulcanus, quasi Volicanus, because it flies thro' the Air: For Fire is generated in the Clouds: And for this reason too Homer says, that Vulcan was precipitated from the Air upon Earth, because all Lightnings fall from out the Air: and because it often lightens in the Island Lemnos, therefore Vulcan is said to have fallen upon that Island. Vulcanus, ut diximus, ignis est, & dictus Vulcanus, quasi Volicanus, quod per aerem volat, ignis enim nubibus nascitur. Unde etiam Homerus dicit eum de mare præcipitatum in terras, quod omne fulmen ab aere cadit: quod quia crebro in Lemnum insulam jacitur, ideo in eam dicitur Vulcanus cecidisse. Thus Servius: and this Fall of Vulcan is describ'd by Milton in the following Verses,

— In

————— In Ausonian Land

Men call'd him Mulciber : and, how he fell
From Heav'n, they fabled, thrown by angry Jove
Sheer o'er the chrystal Battlements. From Morn
To Noon he fell, from Noon to dewy Night ;
A Summer's Day : and with the setting Sun
Dropt from the Zenith, like a falling Star,
On Lemnos, th' Ægean Isle.—————

The same Servius, on the above-cited Passage, teaches, that Vulcan is said to be lame, because Flame, by Nature, is never strait : *Claudus autem dicitur Vulcanus, quia per naturam nunquam rectus est ignis.* And, what is more than all this ; Virgil says, the Thunder is forg'd in subterranean Caverns :

Hic tunc ignipotens cœlo descendit ab alto :
Ferrum exercebant vasto Cyclopes in antro,
Brontesque, Steropesque, & nudus membra Pyracmon :
His informatum manibus jam parte polita
Fulmen erat, toto genitor quæ plurima cœlo
Dejicit in terras, pars imperfecta manebat :
Tres imbris torti radios, tres nubis aquosæ
Addiderant, rutuli tres ignis & alitis Austri.
Fulgores nunc terrificos, sonitumque, metumque,
Miscebant operi, flammisque sequacibus iras.

Æn. 8. v. 424.

Hither the Father of the Fires, by Night,
Thro' the brown Air precipitates his Flight ;
On their eternal Anvils here he found
The Brethren beating, and the Blows go round :
A Load of pointless Thunder now there lies
Before their Hands, to ripen for the Skies :
These Darts for angry Jove they daily cast,
Consum'd on Mortals with prodigious Waste :
Three Rays of writhen Rain, of Fire three more ;
Of winged Southern Winds and cloudy Store
As many Parts the dreadful Mixture frame ;
And Fears are added, and avenging Flame.

Dryd.

The Physiology of which is thus explain'd : Vulcan is said to have a Forge in those Places, between Mount Ætna and the

the Island Lipare, that is to say, between Fire and Wind, because those two Things are very proper, nay, necessary for Smiths : *Physiologia est, cur Vulcanus in ipsis locis officinam habere fingatur inter Ætnam & Liparim, scilicet propter ignem & ventos, quæ apta sunt fabris*; says Nardius, in *Prolusione de Igne Subterraneo*. The several Offices of his Servants,

Brontesque, Steropesque, & nudus membra Pyracmon,
 their very Names in part declare: For Brontes was so call'd, *ἄνδρ' ὃ βροντῆς*, from Thunder: Steropes, *ἄνδρ' ὃ στεροπῆς*, from Lightning: and Pyracmon, *ἄνδρ' τῷ πυρὸς ἐν τῷ ἀνίμην*, because he never stirs from the burning Anvil: And Virgil himself more particularly, *Georg. 4. v. 170.*

Ac veluti lentis Cyclopes fulmina massis
 Cum properant: alij taurinis follibus auras
 Accipiunt, redduntque: alij stridentia tingunt
 Æra lacu: gemit impositis incudibus Ætna:
 Illi inter sese magnâ vi brachia tollunt
 In numerum; versantque tenaci forcipe ferrum.

As when the Cyclops, at th' Almighty Nod,
 New Thunders hasten for their angry God;
 Subdu'd in Fire the stubborn Metal lies:
 One brawny Smith the pressing Bellows plies,
 And draws, and blows reciprocating Air;
 Others to quench the hissing Mass prepare:
 With lifted Arms they order ev'ry Blow,
 And chime their sounding Hammers in a Row:
 With labour'd Anvils Ætna groans below.
 Strongly they strike; huge Flakes of Flame expire:
 With Tongs they turn the Steel, and vex it in the Fire.
 Dryd.

Moreover: On the antient Marbles, Thunder is figur'd with twelve Rays, dispos'd into a Circle; the Rays not strait, but bending into several Angles; each of which ends in three sharp-pointed Fangs: Such too is the Figure of this Virgilian Thunder: Of whose Form Cerdanus thus: It generally thunders, either when it hails, or in great Showers of Rain, or when the Air is hot and sultry, or lastly, when the Winds blow: Now by Rain, *Imber tortus*, Virgil means Hail.

Hail : by aquosæ nubes, great Showers of Rain : by ignis, the heated sultry Air, and by Auster Blasts of Wind : For Tempests are more frequent when Auster, the South Wind, blows, than when any other.

After this, not useless, but necessary, Digression, it is time to return and keep close to our Subject : First then : The Art and Doctrine of Thunder, according to Seneca, is divided into three Parts : I. Investigation. II. Interpretation. III. Exoration. The first Part relates to the Form : the second, to Divination : the third, to the Propitiation and Pacification of the Gods ; of whom, says he, we ought to pray for good Things, and to deprecate from us all manner of Evil : to pray, that they would make good their Promises : to deprecate, that they would remit their Threats : besides, to imprecate and draw down Thunder on the Heads of our Enemies : which last I add to Seneca ; not to give occasion to the learned Muretus, to take in ill part the Omission of it. The Form, I interpret to be the Species and Nature of the Lightning, together, with whatever else can conduce to the Physical and perfect Knowledge of it : in the disquisition of which, according to the Thuscans, its Rise, that is to say, whether it bursts out of the Earth, or breaks from the Skies, deservedly claims the first to be inquir'd into. Now the Thuscans held that the earthly Lightning darts in a strait Line ; the aerial, obliquely. It was believ'd to be of great Moment too, from what part of Heaven the Lightning came ; whither it directed its Course, and where it fell. For we must not forget what Pliny, lib. 2. cap. 54. teaches ; That the Thuscans of old divided and quarter'd out the Heavens into sixteen Parts, which they call'd Temples, as is observ'd by Varro de Lingua Latina, lib. 3. Nor did they lay any small Stress upon this Circumstance : whether the Thunder struck down the strongest Buildings, and overturn'd the Towers and Castles of Kings ; or whether it was weak, and vanish'd inoffensive in the Air. Its Force and Violence too was likewise consider'd : that is to say, whether it struck in an Instant, or linger'd in its Flight ; and, in some Measure, gave warning of the Blow : They likewise observ'd the Size and Magnitude of it : which they measur'd and determin'd by the Events and Effects it produc'd. Besides, by the Consent of all, there are properly three sorts of Lightning, which, according to Seneca, are, I. That which pierces. II. That which shakes to pieces : And III. That which burns : According to Servius, which blasts, which

which burns, which cleaves; and according to Festus, which burns, which blasts, which pierces: and from hence it came to be call'd *trifolcum*, three-fork'd: unless we had rather ascribe that Epithet to the three Kinds of Lightning mention'd by Pliny, i. e. the dry, the humid, and the bright; which were so call'd from their Effects: For the dry does not burn, but dissipate: the humid does not burn, but infuscates: and that, which they call'd the bright, is indeed of a wonderful Nature, as we shall see by and by. I go now to that sort of Lightning that infuscates, or renders swarthy the Things it strikes: Now this, says Seneca, either stains, or colours: which is thus distinguish'd: That is said to be stain'd, whose Colour is tarnish'd, not chang'd: That to be colour'd, whose Colour is chang'd from what it was before; as cerulean, or black, or pale, &c. They observ'd besides, the manner of the Lightning's coming, and the Number of the Flashes and Claps; whether even or odd: and whether alone, or with Hail or Rain: They had regard besides to the Quality of it, whether it were resplendent and glittering; which, perhaps, is that which Suidas calls, white; or swarthy and obscure: And it was of the greatest Importance, whether it thunder'd in a clear or cloudy Sky: whether in the Night, or by Day: whether in the Morning, or the Evening, or at Noon: And so much for the Diagnostick Part: We come now to the Prognostick or Divining.

The Prognostick Doctrine of Lightning was, no doubt, contain'd in their Fulgural Books, and the Priest, or Interpreter of Lightning, was call'd *Fulgurator*. The Antients ascrib'd to Lightning and Thunder a Power of foreboding future Events, superiour to all other ominous Portents: For whatever any other Omens might have portended as a fix'd and certain Event, was all taken away and held to be of no Effect, if Thunder chanc'd to intervene: but not on the contrary: For whatever Thunder had portended was unalterable, and could not be chang'd by the Intervention of any other Omen whatever. It is not certain, who they were that, did at first distinguish Lightning into two sorts; *Brutum* & *Fatidicum*, Brute and Fatidick, or Fate-fortelling, as they afterwards call'd them: for they held, that, whatever was the Cause of Lightning, it was always destin'd to forebode some future Event: whether it proceeded from a fortuitous Collision of the Clouds, as the Latines believ'd: or whether the Clouds suffer'd that Collision, by the Command of the Deity, that Lightning might be struck out of them by that Means,

Means, which was the Belief of the Thuscans, who likewise held, that Lightning does not portend, because it is made, but is made on purpose that it may portend something. But Pliny, lib. 2. cap. 43. says, That no doubt fortuitous Lightnings do sometimes happen; which, either forebode nothing at all; or at least if they do, the Knowledge of what they portend comes not to us. Hence they were call'd Brute Lightnings, as coming on no Design, and, as I may say, upon no Errand whatever. These, says Seneca, strike the Mountains, fall into the Seas, and do no manner of Harm: But the Lightnings that are call'd Faticick, come from their own Stars, and are destin'd to forebode some unavoidable Event: Of these, says Cæcinna, there are three sorts: which he calls *Consiliarium*, *auctoritatis*, and *status*: The *Consiliarium*, or Counsel-giving, precedes the Action, but comes after the Thought: as when we are considering in our Minds, whether we shall do a certain thing or not, and are perswaded to do it by a Flash of Lightning, or dissuaded from the Attempt: That of Authority comes after the Action is done, and forebodes whether the Event will be prosperous or unlucky: That which he calls *Status*, of Station, is when Lightning happens at a time when we are in total Inaction, neither doing, nor even thinking of any thing: this either threatens, or promises, or admonishes: therefore he calls it *Monitorium*, *Monitory*: He makes no mention of a fourth sort, which was call'd *Executivum*, the Executive, and that inflicts Punishments on Transgressours: of which anon.

But before we proceed any farther, it will be necessary to know from whom these Thunders were sent: The Thuscian Books, as Pliny witnesses, taught, that nine Gods had the Privilege of darting these fiery Bolts, and that there are eleven kinds of them; of which Jupiter launches but three: Of these eleven sorts the Romans retain'd but two: and ascrib'd the diurnal to Jupiter, the nocturnal to Pluto: The first *Manubia*, as they call'd it, that is, Thunder-bolt of Jupiter, gently forewarns, and is mild: this he sends at his own Pleasure, whenever he will: He indeed sends a second; but by the Advice of his Council, which consists of twelve Gods, whom he summons for that purpose. This Shaft does sometimes do Good: but in such a manner that the Good it does is always attended with some Hurt: Its Chastisements avail, but punish. The same Jupiter sends also a third Bolt; but not without the Advice and Consent of the Gods,

whom they call *Dij Majores*, *Dij Valentēs*, & *Dij Potentes* θεοὶ μεγάλοι, θεοὶ χριστοί, καὶ θεοὶ δυνατοί. This Bolt destroys whatever it meets; it changes and overturns the State of Things, as well publick as private: For Fire suffers nothing to remain in the same Condition in which it finds it. Others plunder the Armoury of Jupiter, (*Acron* in *Horat.*) and scarce reserving to him the red and bloody Thunderbolts, they assign the white and black to *Minerva*

————— *Scit triste Minervæ*
Sydus ————— *Æn. 8. 265.*

Hence *Minervales Manubiæ*, says *Servius* on that Passage of *Virgil*, by the Power of which the Grecian Fleet was driven on the Rocks of the Mountain *Caphareus*, and perish'd there. Nor is *Pallas* idle,

Prima' coruscanti signum dedit Ægide Virgo,
Fulmineam jaculata facem ————— *Flacc. Argonaut 4.*

And she is the more to be fear'd, because not content with her own, but

————— *Fulmine irati Jovis*
Armata ——— *Sen. Trag. Agamemn.*

arm'd with the Thunder of angry Jove, she threatens sore, and exterminates her Enemies. This Privilege *Juno* envies her,

Ipsa Jovis rapidum jaculata è nubibus ignem,
Disjecitque rates, evertitque æquora ventis.
Æn. 1. v. 46.

For *Minerva* could come at the Thunder, when she would, as she herself boasts in *Æschines* in *Eumen*.

Καὶ κλυδὰς οἶδα μόνῃ δῶμῳ δέων
 Ἐν ᾧ κεραυνὸς ἔσσι. —————

I alone, of all the Gods, know the Keys of the Magazines where the Thunder is kept. And *Servius*, ex *Actio*, observes, that *Juno* too had her Thunder: Hence she upbraids *Jupiter* for darting her Thunderbolts:

————— *Mea*

———— Mea fulmina torques. Statius.

Thus we have three thundering Gods: Mars was the fourth, and his Bolts are red-hot and burning: those of Saturn, cruel and execrable, nor are Pluto's more mild: What can we expect from Vulcan and the South-Wind, which is said to be pollens fulminibus, potent in Thunderbolts?

The Romans, loath to weary so many Gods, gave the Thunder but to two: They assign'd the Day-Lightning to Jupiter, who was call'd Diespiter, i. e. the Father of the Day: and the Night-Lightning to Pluto: The Lightning which they call'd, Fulmen pervorsum, because it was uncertain whether it happen'd in the Night, or by Day, they gave sometimes to the one, sometimes to the other. Besides this, they had I. their Postularia Fulmina, which signify'd the Breach of Vows, and the profane Neglect of religious Sacrifices: II. Monitoria, by which they were taught what to avoid. III. Pestifera, Lightnings, which portended Death and Banishment. IV. Fallacia, which were fatal under an appearance of Good: These gave the Consulship to Persons, to whom that Office would be fatal; and an Inheritance to those who were to be ruin'd by getting it. V. Deprecanea, which brought a shew of Danger where there was none. VI. Peremptalia, which utterly destroy'd the threatening Tokens of other Lightnings. VII. Attestata, that confirm'd the Promises of former. VIII. Atterranea, that happen'd in close Places. IX. Obruta, by which Things that had been struck before, were struck again, before they had been purg'd by Sacrifice. X. Regalia, which fell upon the Courts of Justice, or other publick Buildings, or Places, belonging to a free City. Concerning the Duration, they say, That Lightnings are either I. Perpetua, whose Tokens belong to the whole Life: nor does this sort denounce one single Thing only, but embraces the whole Context and Series of whatever is to happen in the future Age of a Man. These are the Lightnings that happen next after the Enjoyment of a patrimonial Estate, and in any new Circumstance or Condition of any Man, or City. II. Finita, whose Prognostications extend only to a certain Day. III. Prorogativa fulmina, are those whose Threats may be delay'd to be executed, but can never be wholly averted, or taken away: And such of these as they call'd Privata, because they related only to particular Persons, they held could not be delay'd for more

than ten Years, except from the Day of first Marriage, or the Birth-Day : nor the Publica, which regarded Communities, and civil Societies, for above thirty Years, except in the Dedication of Towns.

Moreover : We said before, that the Lightnings, which fly in a direct Line, burst out of the Earth : These the Thuscans call'd Infera, they are most frequent in the Winter, and are held to be the most fatal and execrable ; because they come from a small Distance, and out of a troublous Matter. The Syderial and General, which dart obliquely, and from thence are call'd Oblita Fulmina, are not always lucky, and the most unlucky of them are those that go from West to North : Thus it is of the highest Importance, from whence the Lightning comes, and which way it directs its Course. The most lucky is that which returns towards the Eastern Parts of the Heavens : Therefore when they come from that Part of Heaven, and incline the same way again, they portend the greatest felicity : We read that an Omen of this sort was given to Sylla the Dictator. The others in that part of the World are less prosperous, if not absolutely unlucky. They held it unlawful to interpret, or even to inquire into some : unless they were sent as Indications of future Events to a Guest, or a Parent : The Lightnings that happen'd on the left were esteem'd lucky, because the East is in the left part of the World : The coming of it was not so much regarded, as its return : whether Fire rebounded from the Stroke, or whether the Work being perfected, or the Fire consum'd, the Blast return'd back. The Greeks in general, and some of the Latines, held the Lightning on the right to presage good Fortune : Of this we have frequent Examples in Xenophon, some in Homer, and many in the Latine Poets : However they all agreed, that none portended good Fortune, except those that happen'd in the Day : forasmuch as the nocturnal were unlucky, from whatever part of Heaven they came. There is a Verse of Ennius recorded by Cicero de Divinat. lib. 2. which makes to our present Purpose :

Cum tonuit lævum benè tempestate serena.

And tho', as Capitolinus tells us in the Life of M. Antoninus Pius, the Lightning was innoxious, that in a clear Sky fell into the Court of his Palace, yet it was ominous, and a Presage of Death to Titus. Diodorus Siculus, and Suetonius
both

both witness in general, that in those Days Lightnings were often seen in a serene and unclouded Sky : but those Historians have neither of them thought fit to particularize any of them.

Besides : They had great Regard to the Number of the Flashes : and an even Number seems to portend good Fortune, rather than an odd : at least, it betokens neither Calamity nor Death : But if the Lightning fell on Temples, or publick Buildings, or if Men were blasted by it, in either of those Cases, it was judg'd to signify some great Misfortune : To a free City it threaten'd a Kingly Power : and to others the Subversion of their present State, or total Destruction. And this, as Cicero in Vatin. observes, was the reason, that from the first Building of the City, it was not permitted, but even held irreligious, to hold any Assembly of the People, or to continue the Sittings of their Courts of Justice, whenever it happen'd to thunder. And Livy, lib. 5. Decad. 3. relates, that Marcellus, being created Consul, was remov'd from that Office, because it had thunder'd, when he enter'd upon the Consular Dignity : what would have been done, if a Tempest of Wind and Hail had accompany'd the Thunder ? Which Accident was held to forebode Calamity : And, even at Rome, as the same Livy, lib. 10. Decad. 4. affirms, a Tempest only did sometimes make the Senate break up their Assemblies : For the Minds of Men had already imbib'd the superstitious Credulity, that Lightning portended future Events, and gave Tokens, not of particular Things only, but denounc'd in a successive order the whole Series of future Fates : and that too by Decrees more plain and evident, than if they had been written in the most visible Characters : This Seneca teaches, *Nat. Quæst.* 32. lib. 2. Pliny too seems to have been tainted with the same Superstition, for lib. 2. cap. 53. he says in express Terms, That the Science of the Interpretation of Lightnings was improv'd to that Degree, as was evident from innumerable, both publick and private, Examples, that it foretold what should happen even on a fix'd and certain Day, and whether the Lightning foreboded the delay, or the total Obstruction of Fates, already foretold, or reveal'd, or gave Tokens of others, that lay till then conceal'd : Wherefore let them be, as it has pleas'd Nature to make them, certain to some, doubtful to others, approv'd by some, and condemn'd by others. Thus Pliny.

It now remains, that we say something of their Expiations, by which they endeavour'd to avert the imminent Dangers that threaten'd them. In the first Place, the fulgural Books pronounce, That a Place struck with Lightning ought neither to be regarded, nor trod upon: For which Reason, says Ammianus Marcellinus in Jul. it was lawful to hide or bury the Lightning; but a Crime against the Gods to uncover it. Now the Lightning was then said to be bury'd, when an Altar was erected over the Place where it had fallen: And this Altar had a Hole in the Top of it, open towards Heaven; and was call'd Puteal, or Capitium: by Vulpianus, Operculum. The Place itself Nigidius Figulus calls Bidental, because two Sheep were sacrific'd there; after which, says he, it was immediately deem'd Holy. And Augustus consecrated and dedicated to Apollo the Area in the Palace he had bought, because Lightning had fallen in it: But Bidental signifies sometimes the Sacrifice likewise, and sometimes too the Person that was struek: as in Persius Satir. 2. v. 27.

Triste jaces lucis evitandumque Bidental.

Moreover, to this Custom of burying the Lightning, Lucaⁿ alludes, lib. 1.

————— *Dispersos fulminis ignes*

Colligit, & terræ mœsto cum murmure condit.

And the antient Interpreter of Juvenal, on this Verse,

Atque aliquis senior, qui publica fulgura condit,

Sat. 6.

says, That Lightning is then said to be bury'd, when the Priest has collected together the scatter'd Fires, by which we may reasonably conjecture, that they meant, when he had collected together what was scorch'd by the Lightning; and consecrated the Place by a certain Prayer, pronounc'd with a low Voice to himself, and by heaping up Earth upon it. Thus it had far'd but ill with the Parthian Magicians, if, as Pliny, lib. 37. cap. 9. says they had try'd to find, by digging for it, the Gem, which is call'd Ceraunia, and some take for a real Thunderbolt, because it is never found, but in Places blasted with Lightning since it was not permitted even to look upon such Places. Besides, we learn from Festus, that, by an old Law of Numa,

Numa, it was forbid to burn the Body of a Man, who had been kill'd by Thunder, or to allow him the Rites of Funeral. Every Man, who was slain by Thunder, was bury'd in the Place where he was struck : except, as Quintilian, and some other learned Men observe out of Festus, the Place belong'd to the Publick. Such Men had this Privilege, that the Priests were permitted to gather up their scatter'd Members : This we have from Seneca, who besides, speaking of such as apprehend and tremble at the Danger of Thunder, has this remarkable Passage : *Non maximum ex periculis, sed speciosissimum fulmen est. Male scilicet erit actum tecum, si sensum mortis tuæ celeritas infinita prævenerit, si mors tua procurabitur, si tu nunc quoque cum expiras, non supervacua, sed alicujus magnæ rei signum es.* Lib. 2. Nat. Quæst. in calce. The Earth was heap'd up, not dug into the Ground, as Cornutus is of Opinion, till it rais'd a Monument high enough, to give Notice of the Place to Passers by: Plutarch in Symp. 4. Probl. 2. asserts, That the Bodies of Men blasted with Lightning, never putrify : for many, says he, neither burn them, nor bury them, but suffer them to lie where they were struck ; and hedge in the Place, that those uncorrupting Carcasses may remain as a Spectacle of Admiration : And for this reason they foolishly thought such Persons to be honour'd by Jupiter. But Seneca, Nat. Quæst. lib. 2. with more Consonance to Truth, says, that Bodies, kill'd by Thunder, crawl with Worms in a few Days : and adds besides, that they were bury'd with the Lightning : Whence the saying, *Male tecum agitur, si cum fulmine conderis* : The Places were hedg'd about, that they might not be trod on unawares ; and the Bodies were interr'd to avoid the stench of their Corruption : For it is known by Experience, that as well Men as Beasts, are for the most part suffocated by the Blast of Lightning, not burnt with the Fire : and when the innate Heat of the Animal decays, the remaining Moisture is prone to Corruption. Yet some Persons, struck with Lightning, were not bury'd, but only cover'd with a white Garment ; as well because they believ'd such Bodies did not putrifie ; as that they might be seen by the People : who, nevertheless, were not permitted to look at them, except at some Distance : for none were permitted to come within the Inclosure, but the Priests.

I shall pass by many things relating to Thunder, but can not omit one, which Pliny mentions, lib. 28. cap. 25. where he says : *Fulgetras Poppyismis adorare, consensus est gentium :*

um: All Nations agree in adoring the Thunderbolts, by pressing their Lips close together, and then, by drawing in the Air by force, to make such a Sound as Horsemen generally do, to encourage and put forward their Horses: for such a Noise the Word Poppyismus signifies: and this was the Custom both of the Greeks and Romans in their expiatory Sacrifices: Some of the Learned add likewise the Clapping of Hands, which others nevertheless take to be only the Noise that is made, by closing the Palms of the Hands, and hissing between the Thumbs. But to proceed:

When the Portents and Prodigies were uncommon, or more than usually frequent, they consulted the Tuscan Fulguratores, or the Sybilline Books, and the City was expiated, by publick Sacrifices, and Supplications, and by the Ceremonies they call'd Lectisternia, i. e. bringing their Beds, on which they lay down to eat, into the Temples, where they us'd to feast themselves in Honour of the sacred Rites; as also by votive Games, Livy in Decad. 4. lib. 10. gives an Example of the Purgation of the City, after the fall of Lightning, in these Words: *Ob ea Decem-Viri iussi adire libros, edidere quibus Diis, & quot Hostiis sacrificaretur: Et à fulminibus complura loca deformata, ad ædem Jovis ut supplicatio diem unum esset. Ludi denique votivi Q. Fulvii Conf. per dies decem magno apparatu facti.* For to distinguish to which God the Sacrifice was due, was not so easily discern'd by the Romans, but that they equally sacrific'd sometimes to Jupiter and Pluto, when the Lightning happen'd at a doubtful Time, that is to say, either in the Morning or Evening Twilight; and this Lightning, as we said before, they call'd Pervorsum, Joannes Magnus, in his History, lib. 3. cap. 8. relates a ridiculous Custom of the Goths and Vandals; and which is likewise confirm'd by his Kinsman Olaus Magnus: They tell us, that those People, when they heard the Noise of Thunder in the Clouds, were wont to shoot Arrows up into the Air, to express their earnest Desire to assist their own Gods, whom they believ'd to be then engag'd in Battel with other Gods: and that, not contented with this foolish Superstition, they had Mallets of an unusual Weight, bound about with Brass, and which they held in great Veneration, on purpose that, by their Help, as by the imitative Thunder of Claudian, they might express the Noise they heard in the Heavens, and which they believ'd was made by Mallets likewise: And they held it very meritorious

torious to be thus present, and assist in the Battles of their Gods.

It remains only to speak of the Lightnings, which the Antients call'd Elicia, and these were either commanded and compell'd from Heaven, or allur'd and obtain'd by Holy Rites: Pliny tells us, That Lightning may either be compell'd, or implor'd from Heaven, by certain holy Rites and Supplications; That there was an old Tradition in Etruria, that it had been obtain'd by holy Rites, when a Monster, they call'd Volta, enter'd into the City Volsinii, after having first depopulated the Countrey round it: And the same Authour, on the Testimony of Piso, whom he calls an Authour of Credit, says: that Porfenna, King of the Thuscans, drew down Thunder from Heaven: and that, before him, Numa, had often done the like: he adds, that Tullus Hostilius, endeavouring to imitate them, and either not knowing, or for not observing the due Rites, was himself struck dead by a Thunderbolt. *Extat annalium memoria, sacris quibusdam & pre-cationibus, vel cogi fulmina, vel impetrari: Verus fama He-truriæ est, impetratum; Volsinios urbem, agris depopulatis, subeunte monstro, quod vocavere Voltam. Evocatum & à Porfenna suo Rege, & ante eum à Numa sæpius hoc factitarum, in primo Annal. suorum tradit L. Piso, gravis Author: quod imitatum parum rite Tullum Hostilium, ictum fulmine. Lucosque & aras, & sacra habemus: inter quæ Statores, & Tonantes, & Feretrios, Elicium quoque accepimus Jovem. Plin. lib. 2. cap. 52.* He concludes with making this Remark: *Varia, says he, in hoc vitæ sententia, & pro cuiusque animo. Imperari Naturæ audacis est credere: nec minus hebetis, beneficiis abrogare vires.* Thus Pliny. In relation to Numa, Livy relates the Matter at large, in Decad. 1. Lib. 1. where, among many other Things, he tells us, that Numa, in order to allure down Thunder-bolts from the divine Minds, erected an Altar, on the Aventine Hill, to Jupiter Elicius: *Ad ea (scil. fulmina) elicienda, ex mentibus divinis, Jovi Elicio aram in Aventino dicavit; deumque consuluit auguriis, quæ capienda essent.* And that nothing might be wanting to this Fable, Valerius Antias, as cited by Arnobius, *advers. Gent. lib. 5.* says, that King Numa, not having the Science of procuring Lightning, and, by the Advice of the Nymph *Ægeria*, being desirous to know it, gave Chains and Fetters to twelve chaste young Men, and plac'd them in Ambuscade, near a certain Water, in which Faunus and Martius Picus were wont to bathe, with Orders to sur-

prize and bind them : This they did, and extorted from them the Art of alluring Jupiter, of whom Numa by this means learnt the Art of drawing down Thunder-bolts out of Heaven. The Greeks however will not allow this Honour to be first due to Numa, but ascribe it to Prometheus : who, as Servius on the 6th Eclogue of Virgil, relates, by residing long on the Top of Mount Caucasus, discover'd the Art of alluring down Lightning, and taught it to Men : from whence the Fable of his having stoln Fire out of Heaven. Lastly : these Elicia Fulmina were of three sorts : I. Hospitalia, which Seneca mentions in lib. 2. Nat. Quæst. and these by Sacrifices compel, or rather, to use their milder Expression, invite Jupiter from Heaven : But if his Godship should happen to be unwilling, or in an angry Mood, they invite him to their own Cost : and this, says the same Seneca, was the Misfortune of Tullus Hostilius, the third King of the Romans, whom we mention'd before. II. The Auxiliaria, which were also call'd Advocata, but these always came for the Good of those that call'd them. III. The Imprecatoria, which can not be reckon'd in the Number of Auxiliary Lightning : for no Man desires Destruction, or imprecates Thunder-bolts on his own Head. After all, Pliny, lib. 28. c. 2. observes out of old Authours, that it was a very difficult Task to allure down Lightning by Supplications and Sacrifices. And so much for the Superstition of the Antients, in regard to Thunder and Lightning.

And hence 'tis known, how fiery WHIRL-WINDS rise,
 How they descend, and cut the threatening Skies;
 For often dark and heavy CLOUDS increase,
 And PILLAR-LIKE descend, and reach the Seas,
 435 While all around the troubled Ocean raves,
 Fierce Winds still blow, and raise the boiling Waves.
 And all the SHIPS, in Reach of Danger toss'd,
 Are whirl'd with rapid Turns, and wreck'd, and lost.
 This happens when the tumbling WINDS, that lay
 440 Confin'd in CLOUDS, too weak to force a Way,

N O T E S.

431. And hence, &c.] Hitherto the Poet has been treating of Thunder and Lightning: and is now about to dispute of another Kind of Meteor, call'd Whirlwinds: And for the better understanding of this Disputation, it will be necessary, with Aristotle, lib. 3. Meteor. and with Pliny, lib. 2. cap. 48. to distinguish between the several sorts of Whirlwinds, which the Antients call'd by several Names, according to their several Natures: as Ecnephas, Prester and Typho: For since all these Things, Thunder, Lightning, Ecnephas, Prester, Typho, and Thunderbolts, are only several Winds, we ought to distinguish between them. First then, if the Wind be thin and subtile, and if it be blown and scatter'd piece-meal here and there, it produces Thunder and Lightning. If it be more dense and thick, it begets the Tempest, which the Greeks call *Exveqia's*, i. e. a Storm without Rain, a Hurricane, as Pliny says, lib. 2. cap. 48. But if the Wind bursting out of the Bowels of a Cloud, meet with other Winds, breaking out of other Clouds likewise, and without Fire, it comes to be that sort of Whirlwind, which the Greeks call'd *τιφω*, of which there are two sorts, call'd by the Latines Vortex & Turbo: Vortex, if it make a great and roar-

ing Noise: Turbo, if it make none at all, or but a whistling one. But if the Wind, when it breaks from the Clouds, takes Fire, and kindles into Flame, it makes a Prester, call'd by the Greeks *ωρησις*, which signifies, inflaming, swelling, and making hot, quasi comburens contacta, pariter & proterens, says Pliny, in the Place last cited: If the Wind, after it breaks from the Clouds, do not take Fire; but bursts out in a Flame, it makes the Lightning, which the Greeks call *κεραυνος*, a Thunderbolt: And lastly, if the Wind can not break the Cloud, but forces and drags it down upon the Earth, or Sea, it then makes the Whirlwind, which the Latines call'd Columna, a Pillar. And of these Whirlwinds the Poet disputes in the following 29. v. and seems to call the Columna, Vortex, and Turbo, all of them certain Presters. And first in these 21. v. he explains the Cause of a fiery Whirlwind, call'd a Prester: which, says he, is a Wind impetuously whirl'd about, and that takes fire by the continuance and vehemence of the Agitation. If this Wind burst out of the Clouds, and move violently in a strait Line, it kindles into Lightning only: but if the Cloud be so tough, that it can not break thro', but bears it down into the Sea,

Do drive it down ; for then, by slow Degrees,
 As if some Hand, or Arm above did press,
 The **PILLAR-CLOUDS** descend, and reach the Seas:
 When this divides, the rushing **WINDS** engage
 445 The **FLOOD**, and make the **WATERS** boil and rage :
 For then the **WHIRLING WINDS** descend, and bear
 The thick, tough, heavy **CLOUDS** thro' all the Air,
 But when they reach the **SEA**, they break their Bound,
 And mingle with the **WAVES**, and, whirling round,
 450 With dreadful Noise, the furious Billows raise,
 And light the **WATERS** with a mighty Blaze.
 Sometimes the **WHIRLING WIND** might whisk the Air,
 And, gath ring **PARTS** of **CLOUDS** that wander there,
 Might hollow out itself a **WATRY FRAME**,
 455 All like a **PRESTER**, but without the **FLAME** :
 From these, as **WOMBS**, fierce **WHIRL-WINDS** take their
 And impiously torment their Parent Earth : (Birth,
 But since, at Land, the Hills must stop their Way,
 These Storms are oft'ner seen at open Sea.

Now

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Sea, and, there impetuously whirling round in the Waves, at length takes Fire, it becomes a Prester, the sure Destruction of Sailors.

452. Sometimes, &c.] Presters are seldom felt at Land, but chiefly infest the Sea. There is another sort of Whirlwind, which is not fire: and this too is a Wind, that turns and whisks about with violence in a Cloud, and tumbles down with that Cloud upon the Earth; where breaking out without being kindled into Flame, it whirls and tumbles down all Things where it lights: Neither is this sort of Whirlwind frequent at Land; for the Hills hinder its Descent, and break its force: but at Sea the poor Sailors often feel its violence.

Of this sort of Whirlwind, Pliny, lib. 2. cap. 48. Sin vero flatus repentini depresso finu arctius rotati nubem effregerint, sine igne, hoc est, sine fulmine, Vorticem faciunt: which agrees

with what Lucretius says of it. But whatever he says of their being most frequently felt at Sea, they are very common in Florence, and in several other Countries.

But before we leave this Subject of Whirlwinds, it will not be improper to give a short Account of the Cause of Wind: The Original of which is reckon'd among the hidden Secrets of Nature: Aristotle will have it to proceed from the Earth; and defines it to be a dry earthy Exhalation: Metrodorus and Animaxander held, that it proceeds from the Water: of the same Opinion too is Vitruvius, who, lib. 1. cap. 6. says: Ventus est aëris fluens unda, cum incerta motus redundantia; nasciturque cum fervor offendit humorem & impetus fervoris exprimit vim spiritus flantis: This he illustrates, by the Example of Æolipilæ, Windballs: and Des Cartes pretends to demonstrate the Truth of this Opinion in the same

460 Now CLOUDS combine, and spread o'er all the Sky,
 When little RUGGED PARTS ascend on high,
 Which may be twin'd, tho' by a feeble Tie.
 These make small CLOUDS, which, driv'n on by Wind,
 To other like, and little CLOUDS are join'd,
 465 And these encrease by more, at last they form
 Thick heavy CLOUDS, and thence proceeds a STORM.
 And thus the lofty HILLS may seem to yield
 More MISTS and VAPOURS than the humble FIELD;
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same manner. And Salmastius, lib. de Anno Climacter. asserts the same Opinion, in the very Words of Vitruvius. There is a third Opinion, which seems to have been more antient than either of the former, and according to that, Wind is nothing but Air put in Motion: Apuleius de Mund. is of this last Opinion. Nec enim, says he, aliud est ventus, nisi multum & vehemens in unum coacti aëris flumen: but this is not satisfactory: for, by not assigning the first Cause of that Motion, it leaves the Matter in suspense, and undetermin'd. The most probable Opinion therefore is, That Wind is an earthy, or watry Exhalation, mix'd with saline Spirits, and other Vapours, drawn or forc'd out of the Earth or Sea, by the Power of the Sun, or of subterranean Fires, which being rarefy'd by Heat, or condens'd by Cold, and impell'd for the most Part by a transverse, but sometimes by a direct Motion, exagitates, the Earth, Air and Sea. But of this Subject see particularly my Lord Bacon's Treatise de Ventis: Des Cartes in the Place above cited: Gassendus's Animadversiones on Epicurus. Fromend. in Meteor. Kircher. in Mund. subterr. & Isaac. Vossius, de motu Marium & Ventorum.

460. Now Clouds, &c.] The Poet is now going to treat of the Generation of Clouds; which, he

says, may be produc'd three several Ways: And first in these 7. v. he teaches, that certain rough and hooky Atoms, that are flying to and fro in the Air, meet and join together: These form the thin Clouds first, and these thin Clouds, condensing and joining with one another, make the thick and heavy Clouds,

Anaximenes, Plutarch, and Seneca held the Clouds to be made of the very Concretion, or Congelation of the Air itself: The first of them indeed believ'd, that all Things proceed from the Air: And Plutarch de Placit. Philos. l. 3. c. 4. calls the Clouds ἀέρος παχύτητας, thickenings of the Air: and Epicurus in Laërtius, ἀέρος πηλῆσεις, accumulations, or heaps of Air: But Seneca, lib. 2. c. 30. Spissitudinem aëris crassi: The Thickness of gross Air: For he will not allow, that clear and unmuddy Air can thicken and grow into Clouds: because it is too subtile, and free from Vapours; by virtue of which only it can condense into Clouds. Macrobius; Aër terreni frigoris exhalatione densatus, in nubem cogitur. In Somn. Scipionis, lib. 1. cap. 22.

467. And thus, &c.] In these 9. v. he observes, that Clouds frequently seem to rise from the Tops of high Mountains: the reason of which, he says, is this: because some thin Mists and watry

Because when thin and little MISTS arise,
 470 Not thicken'd yet, and wander o'er the Skies,
 All too refin'd, and subtile for our Eyes ;
 The WINDS do drive them to the MOUNTAIN'S Head,
 And there the thin and airy Cov'rings spread ;
 Which, thick'ning round the Top, there first appear,
 475 And seem to rise from that, and fill the Air.
 But farther on; the SEAS give vast Supplies,
 From these the greatest Stores of VAPOURS rise :
 For CLOATHS grow wet, expanded near the Shore,
 And DROPS arise, and stand in ev'ry Pore :
 480 And therefore from the deep and spacious FLOODS,
 Great stores of MISTS may rise, and frame the CLOUDS.
 Besides ;

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try Steams, that are too subtile to be seen, are driven up thither by the Wind ; where joining together, and growing thick, they become visible. Moreover : our Translatour has omitted the two last Verses of this Argument, which, in the Original, are as follows.

Nam loca declarat fursum ventosa patere
 Res ipsa, & sensus, montes cum ascendimus altos.

And indeed they are of no great Moment ; and therefore I have foreborn to translate and insert them in the Text of this Version. What they say is only this : For, when we ascend a high Mountain, the Thing itself and Sense demonstrate, ventosa loca fursum patere, i. e. that the Winds tend to the highest Places, and reign there. This is the Interpretation Creech himself gives them in his Latine Edition of Lucretius.

476. But farther, &c.] In these 6. v. Lucretius proposes a second Reason of the Generation of Clouds: and that Matter may not be wanting to compose such vast Bodies of Clouds, as are rouling up and down in the Air, he rais-

es Vapours and Exhalations from the Sea : and then in 10. v. from the Rivers and other Waters ; nay even from the Earth itself : not, that he believes any earthy Particles ascend, as Gassendus interprets, but because the Earth, being moisten'd with Dews and Rain, seems to smoke, and breathe forth watry Exhalations, which the Particles of Heat, that are continually descending from above, meet in their Ascent, and press them into Clouds. The last Verse of this Argument is likewise omitted by Creech in this Version : It runs thus in the Original :

Nam ratio cum sanguine abest humoribus omnis.

And indeed the Interpreters know not well what to make of it : some place it above, after v. 410. others below, after v. 531. In either of which Places it seems to have but as little to do as here : so that upon the whole Matter, their Opinion seems best, who will not allow it to be genuine, and therefore absolutely reject it.

478. For Cloaths, &c.] This the Poet has mention'd before, B. I. v. 357.

Besides; the EARTH, and RIVERS, urg'd by Heat,
 Oft breathe soft MISTS, and num'rous VAPOURS sweat:
 Which join, and make thick CLOUDS, and stop the Light;
 485 And stain the glorious SKIES with suddain Night:
 For the warm vig'rous Rays, with constant blows,
 Still beat them on the Back, and press them close.
 And more: EXTERNAL MATTER gives Supplies,
 And SEEDS of CLOUDS, which spread o'er all the Skies.
 490 For I have prov'd the Mass immense, the SPACE
 Is infinite, and knows no lowest PLACE:

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386. For the warm, &c.] This and the following Verse in the Original run thus:

Urget enim quoque signiferi super ætheris æstus,
 Et quasi densando subtexit cærulea nimbis:

In his Interpretation of which we may observe, that Creech has follow'd the Opinion of Gassendus, and some others, who interpret ætheris æstus to mean the Æther itself, whose Heat condenses the Clouds: And this must be explain'd, say they, to be intended of the Antiperistasis, by reason of which the Region of the Clouds grows cold. But our Translator, in his Latine Edition of Lucretius, has chang'd his Opinion, and says, that this Antiperistasis of theirs, as they call it, will avail them nothing: and that they alledge a Cause, by which the Clouds may indeed be attenuated, but never condens'd: And Lucretius himself, a few Verses lower, urges the Heat of the Sun for one of the Reasons of the Liquefaction, and Dissolution of the Clouds into Rain:

Aut dissolvuntur solis super icla calore:

says he, v. 513. And therefore Creech explains ætheris æstus to mean the little Bodies, that are

still descending from the Heavens, in a confus'd and turbulent manner. And indeed this Interpretation seems more consonant to Reason than the other: therefore instead of, For the warm vig'rous Rays, &c. read, For the descending Parts, &c.

488. And more, &c.] In these 14. v. as a third Cause of Clouds, he fetches the Seeds of them from the infinite Space, and from the other Worlds. For Lucretius, after Epicurus, believ'd, that the Atoms, which assemble in the Concretion of Clouds, came not only out of the Air, Water, and Earth, but out of the Void likewise: For having taught, B. I. v. 1005. & seqq. That the Space in which, out of which, and thro' which the infinite Atoms are continually flying, is immense and infinite likewise, what wonder is it, if they supply from that inexhaustible Magazine, a sufficient quantity of Seed, for the Production of Clouds?

External Matter] That is to say, Matter that comes not only from the Sea, nor only from the Earth, nor only from the Air, but from without; i. e. from the immense and infinite Space of the Universe.

490. I have prov'd] See B. I. v. 960. & seqq. & 1050. & seqq. where the Poet has brought many Arguments to prove the Universe

And how the Atoms thro' the VACUUM rove,
 How quick they measure SPACE, and how they move:
 Slow TIME admires, and knows not what to call
 495 The MOTION, having no Account so small.
 What wonder then, that suddain STORMS should rise;
 And hasty NIGHT spread o'er the lower Skies;
 Since from the MASS such vast Supplies are hurl'd
 Thro' ev'ry PORE, and Passage of the WORLD;
 500 And linger here, and join: or break the Chain,
 And fly thro' the divided Skies again?
 Now sing, my MUSE, how RAIN is spred o'er all,
 How wat'ry CLOUDS are join'd, and SHOWERS fall.

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verse to be infinite, and that it has no Centre.

493. How quick, &c.] See B. II. v. 134, &c.

494. Slow Time, &c.] This and the following Verse are transcrib'd from Cowley: and repeated in this place, from B. IV. v. 226.

502. Now sing, &c.] These 30. v. contain a short Disputation of Rain. Many Seeds of Water rise up together with the Seeds of the Clouds, and grow bigger together with the Clouds, in like manner as the Blood, and other Humours increase in proportion with our Bodies. For a Cloud may be suppos'd to be a Body, that contains the Rain, which may be compar'd to the Blood in the Bodies of Animals. To these Seeds of Water and Clouds, add those Particles of Water that the Clouds, like Fleeces of Wool, which they seem to resemble, draw from the Rivers and Sea. And thus when the Clouds are full of Water, if they are press'd either by the force of the Wind, or their own weight, Water must of necessity be squeez'd out, and drop from them: This in 17. v. Then he says in 4. v. that if the Winds rarefy the Clouds, the Rain will likewise drop from them: and if the Heat of the Sun

pierce the Clouds, they will flow like melted Wax. That a violent hasty Shower is occasion'd by a violent Compression of the Clouds: in 4. v. and lastly in 5. v. that constant Showers happen, when many Clouds are heap'd upon one another, and when the Earth resolves into Vapours the Rain it has receiv'd, and sends it up again into the Region of the Clouds.

Aristotle and his Followers, who held that the Elements change from one into another, and so make a Circle of Generation, define Rain to be Air converted into Water, and distilling from a Cloud in Drops. Epicurus held that Rain might be generated two several Ways: I. By Transmutation. II. By Compression. By Transmutation; because such is the Nature of the Air, that it changes by Condensation into Water: and such too is the Nature of a Cloud; that by the retreat and absence of Heat, and by the accession of Cold, its Parts are so transpos'd and vary'd, as renders them more apt to flow and fall: This is exemplify'd by Vapours gathering together in a Limbeck, and then falling in Drops. By Compression, when by Wind or Cold the Cloud is compress'd, and the vaporous

First, with the CLOUDS moist STREAMS of VAPOURS
 505 From ev'ry Thing ; and spread o'er all the Skies : (rise,
 And, as in MAN, the MOISTURE, SWEAT and BLOOD
 Grow with the Limbs, increasing with the Cloud.

And oft as WINDS do whirl them o'er the Main,
 The CLOUDS, like WOOL, do dip themselves in RAIN,
 510 To shake their FLEECES o'er the Earth again.

The RIVERS, LAKES, and POOLS, when stirr'd by Heat,
 Breathe forth soft MISTS, and num'rous VAPOURS sweat.

These rise, and set in CLOUDS ; and there combin'd,
 Or by the ambient COLD, or driving WIND,
 515 They thence descend, because the WINDS divide,
 Or else the CLOUDS contract, their injur'd Side ;
 Or else the upper CLOUDS press those below,
 And squeeze the WATER out, and make it flow.

And when the WIND makes thin the watry FRAME,
 520 Or RAYS cut thro' it with a vig'rous Flame,

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vaporous Corpuscles within the Hollows of it are crowded together ; and thus, by that accession of Weight, or by the force of the Wind, are driven and squeez'd out of the Cloud, in like manner as Water out of a Sponge. From whence it appears, that the Drops of Rain are form'd by Co-alition, rather than by Division : and that Rain is not, as it is vulgarly taken to be, a watry Mass effus'd from a Cloud, as Water out of the Rose of a watering Pot, nor, as Trepiades in Aristophanes, deriding this Opinion, says, does it proceed from Jupiter's making Water thro' a Sieve : For, if there were any such Stagnation of Water in a Cloud, it would fall from thence in a Torrent, or as Water does from Spouts, rather than in Drops. Moreover, there are reckon'd three Kinds of Rain : Stillicidium, Imber, and Nimbus : The first is a misty Rain : The second more intense, and compos'd of larger Drops, a sober Rain : The third, a violent, pouring Rain ; which, as Fromondus says, falls decumanis

Guttis : Apuleius de Mundo sums up the whole Matter in a few Words : Tot diversitatibus, says he, pluviae cadunt, quot modis aer nubium conditionibus cogitur.

505. From ev'ry Thing] Hippocrates agrees with Lucretius in this Opinion, and lib. de Aer. Aqu. & Loc. says expressly, that there is Moisture in all Things.

508. And oft, &c.] Here the Poet teaches in 5. v. that while the Clouds are driven by Winds over the Surface of the Sea, or other Waters, they, like Wool, hung in damp Places, imbibe and suck in the Moisture.

513. These rise, &c.] In these 6. v. the Poet mentions one of the Ways, by which Rain distills from the Clouds : that is, by Compression : when the Clouds, compress'd by the Force of the Wind, or by the great Quantity of Water, contain'd within their Bowels, let drop the Rain ; as Water is squeez'd out of a Sponge, by pressing it.

519. And when, &c.] These 4. v. contain the other Way, by which

The RAIN breaks forth, the injur'd CLOUD appears
Like melted running WAX, and drops in Tears.

But when the WIND with higher CLOUDS agrees,
And their united Force begins to squeeze,
525 When both do press the CLOUD, swoln big with RAIN,
Then STORMS descend, and beat the humble Plain.

Then constant SHOW'RS, when war'ry CLOUDS, that lie
On one another's Back, receive Supply
From ev'ry Quarter of the lower Sky.

530 And when the thirsty EARTH has drunk the Rain,
And throws it up in VAPOURS back again.

And when the adverse SUN's bright Beauties flow,
And strike thick Clouds, they paint the GAWDY Bow.

And

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which Epicurus, and, after him, Lucretius, held, that Rain might be made: to wit, by Transmutation, that is to say, when the Clouds, being struck and rarefy'd, either by the Force of the Wind, or the Heat of the Sun, distil in Rain, as is explain'd above, v. 502.

523. But when, &c.] These 4. v. that give the Reason of a violent Storm of Rain, are sufficiently explain'd in the Note on v. 502. and so likewise are the five that follow them, and assign the Cause of constant Showers.

532. And when, &c.] In these 2. v. he tells us, that a Rainbow is made by the Beams of the Sun, striking upon an opposite and wet Cloud.

Lucretius says not any thing of the various Colours of the Rainbow; a Subject which nevertheless has employ'd many of the Philosophers: and concerning which, there are two Things chiefly to be inquir'd into; their Number, and their Order: As to the first, Aristotle discerns only three distinct Colours: ποικίλον, a light Red, or Saffron, as some interpret it: χλωρός, Green, and πορφύρεος, Purple, or Violet, or Cerulean: and thence he call'd the Rainbow three-colour'd:

but Ptolomæus calls it seven-colour'd, because of the mingled Colours that intervene among those three chief Colours. Others call it many-colour'd, as if the Number of its Colours could scarce be distinguish'd: Whence Virgil, *Æn.* 4. v. 701.

Mille trahit varios adverso sole colores.

A Rainbow is only the Picture of the light of the Sun, in an opposite Cloud, moist or wet, and just ready to be dissolv'd, and fall down in Rain: It is in itself of no colour: and the various Colours that appear, are but Reflections of the Light of the Sun receiv'd differently, according as the Cloud is more or less dense: this is evident by artificial Rainbows. And yet this Shadow, this almost Nothing, does, by Reflection, sometimes make another Rainbow, tho' not so distinct and beautiful. Sir R. Blackmore describes a Rainbow poetically, and like a Philosopher too;

Thus oft the Lord of Nature, in
the Air,
Hangs Ev'ning Clouds, his fable
Canvass, where
His Pencil, dipt in Heav'nly
Colours, made
Of intercepted Sun-beams, mix'd
with Shade

Or

And how the other METEORS rise and fall,
 535 What Stamps the figur'd SNOW, and moulds the HAIL;
 And

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Of temper'd Æther, and refracted Light,
 Paints his fair Rain-bow charming to the Sight.

There are only four chief Colours in a Rain-bow. I. A light red. II. A yellow, or saffron. III. A green. IV. A purple. These Colours change their Site and Order, according to the difference of the Rain-bow: for there are two distinct sorts of Rain-bows; Iris primaria, and Iris secundaria; the primary and secondary Rain-bow: The primary Rain-bow is that which for the most part appears alone, and in which the ruddy Colour is outmost, or highest; the yellow next, the green the third Colour, and the purple the inmost, or lowest: But the Iris secundaria, or secondary Rain-bow, is that which never appears alone, but always above, and larger than, the primary, and has the same Colours, but more faint, and quite inverted: that is to say, in the secondary Rain-bow, the purple Colour is the outmost, or highest, the next to that the green, the third the yellow, and the ruddy the inmost or lowest. This Rain-bow is not so distinct and beautiful as the other, of which it is held to be only a Reflection. It is agreed by all, that there are two Causes of the colours of the Rain-bow; the Sun, and the watry Cloud plac'd against it: but they do not explain this in the same manner. Metrodorus in Plutarch de Placit. Philos. l. 3. c. 3. believes, that the Redness of the Rain-bow proceeds from the Beams of the Sun, and the cerulean Colour from the Cloud. Seneca assents to this Opinion, and adds, that the other Colours

are only a mixture of these two Aristotle 3. Meteor. will have the Cloud to be in the Nature of a Mirrour, from which the Beams of the Sun, being variously reflected, produce the various Colours: the light red, because they are reflected from that part of the Cloud that is nearest to his Orb; the green, because they are reflected from the part that is farther off; lastly, the purple, because they are scarce reflected at all, by reason of the yet greater Remoteness of the Cloud: nor does he distinguish the yellow from the red, only because it grows whitish, by reason of the Vicinity of the green. Scaliger believes the Cloud to consist of the Particles of the four Elements, and therefore will have the upmost parts of it to turn red, when they receive the Light of the Sun, because they are fiery; the next to become yellow, as being aerial, and the third to grow green, as holding of the Earth. As to the Figure of the Rain-bow, it is round; but it would be too tedious to relate the various Opinions why it is so. Of this consult P. Gassendus on the tenth Book of Laërtius. Animad. de Meteorolog. p. 1123.

534. And how, &c.] Lucretius says nothing in particular of the Causes of Snow, Wind, Hail, Hoar-frost, Ice, &c. but only takes notice in these 7. v. that whoever contemplates on these Things, and considers the Clouds and Showers, and at the same time reflects on the various Figures and Motions of the Principles, will easily be able to comprehend the Causes of these and the other Meteors, which he leaves unexplain'd.

535. The figur'd Snow, &c.]
 R r r r 2 Pliny,

And why the WATER's Pride and Beauty's lost,
 When rig'rous WINTER binds the Floods with Frost,
 'Tis easy to conceive, if once we know
 The Nature of the ELEMENTS, or how
 540 Their FIGHTING POW'RS must work, or what they do.

And next of EARTHQUAKES. —————

First then you must suppose the EARTH contains
 Some SEEDS of WINDS, spred o'er its hollow Veins;
 And there, as well as here, fierce VAPOUR reigns:
 And

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Pliny, lib. 17. cap. 2. calls Snow, the Foam of celestial Waters, when they dash against one another; which, says Cowley, is ingeniously express'd for a Poet, tho' but ill defin'd for a Philosopher. Aristotle, and after him, most of our modern Philosophers hold it to be generated of a moist, but rare and thin Cloud, which, being condens'd by cold, does, as it falls down, that it may the more easily cut thro' the Air, divide itself into Flakes, like Fleeces of Wool; To which the Psalmist alludes, *Qui dat nivem, sicut lanam*, Psal. 147. He gives Snow, like Wool: Yet Bodinus, in *Theatro Naturæ*, is of Opinion, that the Royal Psalmist resembles Snow to Wool, because of the Warmth it affords to Plants, and vegetables in the Cold of Winter, as woollen Garments do to Men, rather than for its fleecy Similitude. The whiteness of Snow is deriv'd from its efficient Cause, which is Cold; and also from the copious Mixture of ærial Spirits. Anaxagoras affirm'd it to be black: and in Armenia it is of a ruddy Colour: which, as Eustathius on the second Iliad observes, is caus'd by the terrestrial Particles, or Atoms of the Soil of that Countrey, which abounds with Minium: For those Particles, mixing with those of the Air, tinge the Snow, and give it that Hue. Of the wonderful Contexture and Figure of Snow,

which is said to be always sexangular, see Kepler, who has written a particular Treatise upon that Subject.

Moulds the Hail,] Hail is nothing else but Rain congeal'd in its Fall: And this Congelation or Concretion is made not far from the Earth, because Hail is never seen upon the high Mountains, which are often cover'd with Snow: Besides; Hail, the nearer to the Earth the Cloud is, out of which it falls, is the more triangular or pyramidal in its Figure: the higher the Cloud, and the more remote from the Earth, the rounder the Hail: The reason of which is, because those Inequalities, or Angles, are worn away, and rounded by the length of its Passage, and Descent thro' the Air: And its congeal'd Hardness proceeds from the Antiperistasis of the lower Region of the Air: and this too is the reason why Hail falls more frequently in Summer than in Winter; and seldom in the Night, unless the Night be warm. See more in Fromondus, *Meteorolog. lib. 5. cap. 9.* I will only add Aristotles short, but true, Definition of Snow and Hail: Snow, says he, is a Cloud congeal'd, and Hail congeal'd Water.

541. And next, &c.] Before we enter on this Disputation of Earthquakes, it may not be amiss to take notice of the several sorts of them. Apuleius, lib. 1. de Mundo,

545 And many LAKES, and POOLS, and spacious CAVES,
And secret RIVERS there roll boist'rous Waves :
For NATURE'S Laws command, and REASON'S prove,
The Parts BELOW resemble those ABOVE :

These Things suppos'd ; when those vast COURTS be-
550 Shall fail, the upper EARTH must tremble too : (low
For HILLS must sink, and from the mighty Fall
Quick TREMBLINGS must arise, and spread o'er all :

No

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Mundo, reckons up seven several sorts of Earthquakes. I. The first is term'd Epiclintes, seu Inclinator, from ἐπικλίνω, I incline, because it moves sidelong ; and, thus, striking at oblique Angles, overturns Things by inclination, or sideward. II. The second is call'd Brastes, seu effervescens, from βράζω ; I boil ; the similitude of boiling Water, because it bears all above it in a direct Line. III. The third, Chasmatias, from χασμαῖω, I gape, because it makes an Hiatus or Chasm, in which the Place it forces, is swallow'd up. IV. The fourth, Rhectes, from ῥήσσω, I break, because it forces its way by a Rupture ; tho' it opens not so wide a Chasm as the former. V. The fifth sort is call'd Ostes, from ὠσίζω, I thrust with Violence : and this both shakes and overturns. VI. The sixth, Palmatias, from παλῶ, I shake, or throb : this shakes the Ground and Buildings, but not so as to overturn them. VII. The seventh is call'd Mycematias, or Mycetias, from μύκασμαι, I bellow, because it makes a roaring Noise. But Ammianus Marcellinus, and, after him, Coelius Rhodiginus, allow but four Kinds of Earthquakes.

Thales and Democritus ascribe the Cause of Earthquakes to Subterranean Winds, that undermine the Bowels of the Earth, and then force out their Passage : The

Stoicks attribute it to Moisture, rarefy'd into Air ; which struggling for room to get free, and meeting with the thick and tough Body of the Earth, shakes it by its struggling. Others hold that Earthquakes proceed from inclos'd Air, or Spirits arising from combustible Matters, as Sulphur, Nitre, Allum, Sal-Armoniack, Bitumen, or the like ; which being set on Fire, and consequently rarefy'd, cause the same Effects, as Gun-powder does in Mines. See Fromond. Meteorolog. lib. 4. cap. 1, 2, 3. and Kircher in his Mund. Subterranean. lib. 4. cap. 2. where those Authours treat of these Matters at large. I now return to Lucretius, who, in order to give a right Explication of Earthquakes, first supposes several Things, which I think no Man ever doubted : And first, says he, in 8. v. you must suppose the Earth to be full of Hollows, that these Caverns are full of Vapours, into which the Wind can easily rush : In the next Place, that there are many Lakes, many broad Pools of Water, and Rivers too, rolling their Waves within the Bowels of the Earth. These Things being granted ; the Poet assigns the first Cause of Earthquakes to the Earth itself ; and in 8. v. more tells us, that one Cause of Earthquakes may be this : When any of those subterranean Cavities are decay'd by length of Time ; and 'tis certain they will decay ; the upper part

No wonder this : while CARTS go slowly on,
 Or swifter COACHES rattle o'er the Stone,
 555 Altho' the WEIGHT's not great, the HOUSES feel,
 And shake at, ev'ry Jumping of the Wheel.

Or

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of the Hollow will fall down : nor can it be doubted, but that a Trembling of the Earth must be caus'd by such a concussion, since we see, that when Coaches or Waggon's go along the Streets, the Houses on either side are shaken.

This was the Opinion of Anaximenes, who in Seneca, lib. 6. says, that the Parts of the Earth, which Moisture has loosen'd, or subterranean Fire undermin'd and consum'd, or the Violence of Wind has shaken, or that the length of Time has brought to moulder and decay, may fall in. But Aristotle and Plutarch say, that Anaximenes held, that these fallings in of the Earth could not proceed, except from Dryness and Moisture. Epicurus in Seneca, lib. 6. cap. 20. speaks of this first Cause of Earthquakes, in these Words : *Fortasse aliqua parte terræ subito decidente terra ipsa percutitur, & inde motum capit : Fortasse aliqua parte terra, velut columnis quibusdam ac pilis, sustentatur, quibus vitiatis ac recedentibus, tremit opus impositum : Fortasse calida vis spiritus in ignem versa & fulmini similis cum magna strage obstantium fertur.* Perhaps, says he, some part of the Earth falling down on a sudden, the Earth itself is shaken, and thence is caus'd the Motion : Perhaps in some parts the Earth is supported as with Pillars, which being decay'd, and giving way, the superimpos'd Weight trembles : Perhaps the hot Force of Wind is chang'd into Fire, and, borne about like Lightning, makes a wide Destruction of all

Things that resist its Passage. And in the same Authour, lib. 6. cap. 9. Anaxagoras holds almost a like Cause of Earthquakes, which, he says, are the Effect of Lightning.

553. While Carts, &c.] Seneca Nat. Quæst. lib. 6. cap. 22. *Si quando magna onera per vicos vehiculorum plurium tracta sunt, (perhaps per Vicos vehiculorum plurium ordine tracta sunt) & rotæ majori nisu in salebras inciderunt, terram concuti senties.* Asclepiodorus tradit, cum petra è latere montis abrupta cecidisset, ædificia vicina tremore collapsa. Idem sub terris fieri potest, ut ex his, quæ impendent, rupibus aliqua resoluta magno pondere & sono in subjacentem cavernam cadat, eo vehementius, quo aut plus ponderis habuit, aut venit altius : & sic commovetur omne tectum cavatæ vallis. When heavy Loads are drawn in Carts along the Streets ; if the Wheels happen to plunge into a Hole, you will feel the Ground tremble. Asclepiodorus relates, that a Rock, breaking off from the side of a Mountain, shook down the neighbouring Buildings as it fell. The same Thing may happen in the Hollows under-ground : if any of the impending Rocks break off with mighty Weight and Noise, and tumble down into the subjacent Cavern, and that too with more violence and impetuosity, the greater the Weight is, and the higher it falls ; then all the Bulk of Earth, that covers that Cavity, will be mov'd and tremble.

Or else from arched **CAVES** great **STONES** may fall,
 And strike the under **WAVES**, and trouble all;
 Those agitate, and shake th' inclosing **BALL**:
 560 For when the **LIQUOR**, as Experience proves,
 Is troubled, all the **VESSEL** shakes and moves.
 Besides; when **WINDS** below, with mighty Force
 Against resisting **CAVES** direct their Course,

The

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557. Or else, &c.] Another Cause of Earthquakes, and which he ascribes to Water, is contain'd in these 5. v. to this Effect. If a vast quantity of Earth fall down into a great Pool of Water, it will cause an Agitation in that Water, and that Agitation may cause a staggering or reeling of the Earth, that contains that Water, as in a Vessel.

Democritus, as Aristotle, lib. 2. de Rebus Superis witnesses, was of Opinion, that the Earth, since it abounds with Water, and admits into its Bowels a great quantity of Rain, is mov'd and shaken by it: For, because the Cavities can not contain all the Water, the Earth swells and increases with it: and thus the Water, forcing its way into the Earth, causes an Earthquake: and the Earth growing dry, and attracting the Water from the Places, that are full, into those that are empty, is mov'd by the Water, that changes place, and glides from one into another. Thus Epicurus in Seneca, lib. 6. cap. 20. Ergo, ut ait Epicurus, potest terram movere aqua, si partes aliquas eluit & abrasit, quibus desit posse excavatis sustineri, quod integris ferebatur. Thus in A. Gellius, lib. 2. cap. 28. the Poets feign, that Neptune, that is, Water, is the Mover and Shaker of the Earth: To this likewise may be referr'd the Opinion of Thales, that the Earth is supported by Water, and sometimes runs adrift, and floats, like a Ship, got loose from her Anchor. And indeed, in

Earthquakes, when the Earth opens and gapes, Water for the most part breaks out, almost in the same Manner, as it works itself into a Ship that has sprung a Leak. But Lucretius believes that the Earth shakes, by reason of huge Pieces of it, that break off and fall down into a Cavern of Water: as, for Example, a Vessel full of Water can not remain without Motion, if the Water it contains, fluctuate; till that Water ceases its Agitation, and be at rest. Thus he seems to speak after the Opinion of Thales, who held that the Earth floats in Water.

562. Besides, &c.] In these 20. v. he proposes the Wind as a third Cause of Earthquakes, and says, that the Wind, rushing into the Caverns of the Earth, makes it incline, and, as it were, drives it forward: But since the Blast is not continu'd on [for if it were the whole Earth would fly before the driving Violence] and since, sometimes meeting with opposition, it is repell'd, and goes back, the Earth, after several fluctuating Motions, settles again in its antient former Seat. But by this fluctuation of the Earth, Buildings are shaken and tumbled to the Ground.

To this sort of Earthquake may be referr'd, that amazing Prodigy, which Pliny, from the Authority of the Tuscan Books relates of two Mountains in the Countrey of Modena, which, Lucius Marcius and Sextus Julius being Consults, met, and butted against each other, making

The EARTH that way inclines : then, fixt before,
 565 Our HOUSES nod ; the HIGHER nod the MORE :
 The hanging BEAMS start from the tott'ring WALL,
 We fly our Houses, and we dread the Fall.
 And yet some think the WORLD will ne'er decay ;
 The scatter'd SEEDS, dissolv'd, flie all away ;
 570 Tho' these few fighting WINDS with ease displace
 The heavy EARTH, and turn the weighty MASS.
 For did these still rush on, no Force could stay
 The coming RUIN ; all would soon decay :

But

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making a dreadful Noise, and casting out Smoke and Fire into the Air, and then retiring : he adds, that this was seen by many Romans from the Æmilian Way. *Namque montes duo inter se concurrerunt crepitu magno assultantes ; inter eos flamma fumoque in cœlum exeunte interdiu ; spectante è viâ Æmiliâ magnâ Equitum Romanorum familiarumque & viatorum multitudine, Plin. lib. 2. cap. 83.* Moreover : The sort of Earthquake, which Lucretius here speaks of, is that, which they call *Epiclintes*, or *Inclinators* : and is compar'd to the nodding Motion of a Vessel in the Water. But Aristotle allows only two sorts of Earthquakes : which he calls a Trembling, and a Pulsion : The Trembling is compar'd to the shaking that siezes us in a Fit of an Ague : The Pulsion, to the Beating of the Arteries : Now because this last seems to be a Succussion of the Earth, while it is shaken, or an intermitting and perpendicular Motion : And because the Trembling seems to be without Intermission, and a lateral, or sidelong Motion ; therefore some bethought themselves of this sort of Earthquake, which they call an Inclination, while the Earth inclines and nods towards the Horizon, This inclining Earthquake is mention'd

by Milton in *Paradise Lost*, B. VI. As if, says he,

Winds under-ground, or Waters forcing Way
 Side long, had push'd a Mountain from his Seat
 Half sunk with all his Pines.—

572. For did, &c.] To this purpose Ovid speaking of the Winds, says ;

*His quoque non passim mundi fabricator habendum
 Aëra permittit. Vix nunc obstititur illis,
 Cum sua quisque regant diverso flamina tractu,
 Quin lanient Mundum.*

Met. i. v. 57.

Nor were these blust'ring Brethren left at large,
 O'er Seas and Shores their Fury to discharge :
 Bound as they are, and circumscrib'd in Place,
 They rend the World, resistless where they pass. Dryd.

And Virgil yet more closely to the Sense of Lucretius ; says, that Æolus

*Lucantes ventos, tempestatesque sonoras
 Imperio premit, ac vinclis & carcere frænat.* *Æn. I. v. 57.*

But since they press but now and then, their Course
 575 Now here, now there, now fly with mighty Force,
 And, then repell'd, return with weaker Wings,
 The EARTH oft threatens Ruin, seldom brings :
 Inclining only from its usual PLAIN,
 Then turns, and settles in its Seat again :

580 And therefore HOUSES nod, and seem to fall ;
 High, most ; low, less ; the lowest, least of all.

But more ; the EARTH may shake, when WINDS begin
 (Or rais'd WITHOUT in Air, or bred WITHIN)

To rage thro' hollow CAVES, and, whirling round,
 585 Endeavour still to force the narrow Bound,
 At last break thro', and leave a gaping Wound.

Thus ÆGÆE, thus PHOENICIAN Towns did fall,
 The greedy EARTH gap'd wide, and swallow'd all :
 Besides

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Ni faciat, mare ac terras, cœ-
 lumq; profundum
 Quippe ferant rapidi secum, ver-
 rantque per auras. v. 63.

With Pow'r imperial curbs the
 struggling Winds,
 And sounding Tempests in dark
 Prisons binds :

Which did he not, their unresist-
 ed Sway

Would sweep the World before
 them in their Way :

Earth, Air, and Seas thro' empty
 Space would roul,
 And Heav'n would fly before the
 driving Soul. Dryd.

582. But more, &c.] In these
 21. v. he says, that this Inclina-
 tion and fluctuating Motion of
 the Earth, is often attended with
 a violent Beating, and Succussion
 of it : for if the Wind break thro'
 the Caverns, and cleave the
 Earth, then Cities, Islands, &c.
 together with all their Inhabi-
 tants, are ingulph'd and swallow'd
 up in the hideous Chasm : But if
 the Wind do not break thro'
 them, there is then only a Trem-
 bling, or, as it were, a shudd'ring
 of the Earth, which is caus'd by

the chilling Wind, that is dif-
 fus'd thro' all its Pores. Now
 tho' there seem but little or no
 danger to be apprehended from a
 bare Trembling of the Earth on-
 ly, yet it may be join'd with the
 other sorts of Earthquakes : Nor
 can any one be certain, but that
 the Trembling may be often re-
 peated, and that too with still
 more and more Violence, so as to o-
 verthrow the Buildings, and make
 the Earth gape a little. Seneca says,
 that Epicurus held Wind to be
 the chief Cause of Earthquakes,
 Nullam tamen placet Epicuro
 causam esse majorem, quam spi-
 ritum. Nat. Quæst. lib. 6.
 cap. 20.

587. Ægæ] The Name of se-
 veral Towns. I. in Macedonia,
 not far from the River Halyac-
 mon, and where the Kings of
 Macedonia were bury'd, Plin.
 lib. 4. c. 10. II. In Cilicia, on
 the Banks of the River Pyramus,
 now Malmistra, Plin. lib. 5.
 cap. 27. III. In Æolia, Plin.
 lib. 5. c. 50. IV. In Eubœa,
 now call'd Negroponte, and from
 which Strabo says the Ægean Sea
 took its Name. V. In Lydia.
 VI. In Ætolia. VII. In Locris,
 S f f f Steph.

Besides, a thousand Towns, a thousand Isles,
 590 Whilst cruel EDDIES dimpled into Smiles,
 Have fall'n, all swallow'd by the greedy MAIN,
 And poor Inhab'rants strove for Life in vain.
 But if the VAPOUR's cold, too weak the WIND
 To force a Way, if by strong Bounds confin'd,

Is

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Steph. But Lucretius speaks of Ægæ in Achaia, and which is commonly call'd Ægira, Plin. lib. 4. c. 5. And the Earthquake which the Poet here mentions, is perhaps the same, of which Aristotle. lib. 2. Meteor. c. 8. and some others of the Antients make mention, and say, that two great Towns, not far from Ægira, and whose Names were Helice and Bura, were swallow'd up by an Earthquake: Of which Ovid. Metam. 15. v. 293.

Si quæras Helicen & Buran, A-
 chaïdas urbes,
 Invenies sub aquis; & adhuc of-
 tendere nautæ
 Inclinata solent cum mœnibus
 oppida merfis.

Phœnician Towers] Lucretius mentions Sidon, a City of Phœnicia, one of the Provinces of Syria; and which was built by the Tyrians, who at first inhabited the midst of the Countrey, where being afflicted with continual Earthquakes, they left their Abodes, and built a new City near the Sea-shore, and call'd it Sidon, from the great Plenty of Fish, with which the Sea abounded. For Sidon in the Phœnician Language signifies a Fish. Tyrïorum gens condita à Phœnicibus fuit, terræ motu vexati, relicto patriæ solo, Assyrium stagnum primo, mox mari proximum littus incoluerunt, condita ibi urbe, quam à piscium ubertate Sidona apel- laverunt. Nam piscem Phœnices Sidon vocant. Justin, lib. 18. And what Lucretius says of this

Town, is confirm'd by Possidonius, who in Strabo writes, That a City, situate above Sidon, was totally swallow'd up by an Earthquake, and that near half of Sidon itself was thrown down. But notwithstanding these Authorities, Faber believes, that some other Earthquake is meant in this Place. For, says he, that Passage of Justin is taken erroneously: For Justin is not speaking of that Earthquake, which threw down the Town of Sidon: but of that, which did great Mischief to the Phœnicians, not on the Coast where Sidon stood, but in the Countrey of the Idumeans: For the Phœnicians of Justin are the Idumeans: and Herodotus, Pliny, and Dionysius the African, Witness, that they were originally Inhabitants of the Coast of the Red Sea: To which he adds, that by the Stagnum Assyrium of Justin, is meant that very Sea or Lake, which in Holy Scripture is call'd, the Lake of Gennesareth. Sidon is the Port in the Mediterranean, now call'd Sayde.

589. Besides, &c.] Pliny, lib. 2. cap. 80. mentions twelve Cities of Asia, that were destroy'd by an Earthquake, all in one Night. The like happen'd not many Years ago to the City of San Severo in Apulia, now Puglia: and part of Ragusa was lately swallow'd up.

590. Whilst cruel, &c.] If this Verse were left out, the Sense of Lucretius would not be interrupted, nor imperfect: Therefore Creech might have left it where he found it: Cowley, David.

The

595 It spreads o'er all the Pores the Earth contains,
 And brings a shiv'ring COLD thro' all the Veins ;
 As when FROST comes, it brings a trembling Chill,
 And makes our Members shake against our Will ;
 Then MEN begin to fear, and wisely dread,
 600 And fly the Tow'rs that nod their threat'ning Head :
 Or else they think the EARTH will fail ; the Ground
 Will gape, and all sink thro' the mighty Wound.
 Ev'n those, who think the WORLD must still endure,
 ETERNAL still, from FATE and AGE secure,
 605 Yet often, waken'd by the present Fear,
 Start all, and think the Dissolution near :
 They think the EARTH will sink, the WORLD will fall ;
 And Ruine and Confusion spread o'er all.
 Now I must sing, my MUSE, why greedy SEAS
 610 Devour the WATER still, yet ne'er increase ;
 For it seems strange, that RIVERS still should flow,
 And run for num'rous Years as much as now ;
 And, tho' they daily bring a mighty Store,
 The spacious OCEAN should increase no more,
 615 But still be bounded with the former Shore :

}
 And

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The Terrour of their Brows, so
 rough e'er while,
 Sunk down into the Dimples of a
 Smile.

596. A shiv'ring Cold] *Lucr.* Dispartitur, ut horror. Which *Celsus*, lib. 3. cap. 3. speaking of Feavers, explains: interpreting Horrour to be a trembling of the whole Body. *Horrorem voco*, says he, *ubi totum corpus intremittit*.

603. Ev'n those, &c.] In these 6. v. he insults over those, who believe the World eternal and immortal; even tho' they perceive the Earth, that great part of it, to be thus shaken and impair'd; nay, tho' they themselves fear the Dissolution and Ruin of the whole Frame.

609. Now, &c.] Since so many and so great Rivers are continually discharging their Waters into

the Sea, why does it not increase, and overflow its Bounds? *Lucretius* answers in 11. v. I. That the Gulph, into which the Rivers disembogue their Streams, is so vast, that all their Waters, together with the Rain, Snow, Hail, &c. seem not to add one Drop to the Sea: II. In 9. v. That the Sun drinks up a great deal of its Moisture: III. in 5. v. That the Winds brush off and carry away no small quantity: IV. In 4. v. That the Clouds take some away: And V. in 8. v. That as the Rivers run into the Sea, so they are reconvey'd from thence thro' the hidden Veins of the Earth, back to their own Springs: Thus the Waters roul in a revolving Course, and therefore no wonder the Sea does not increase.

Thus too the Authour of *Ecclesiast.* solves this Question: *Omnia*

And yet it is not strange: for THESE, the RAIN,
And all the MOISTURE that the CLOUDS contain,
Scarce seem a DROP, compar'd to spacious SEAS;
No wonder then the WAVES do ne'er increase.

620 Besides; the SUN draws much; the fiery Ray
Descends, and forces many Parts away:
For Sense assures, that when the busy BEAMS
Press moisten'd CLOUDS, the VAPOURS rise in Streams:
Therefore from spacious SEAS the RAYS must bear

625 More watry PARTS, and scatter thro' the Air:
But now, tho' here and there few PARTS arise,
Yet a vast spacious MASS of WATER flies
From the whole SEA, and spreads o'er all the SKIES.

And then the WINDS take some, with wanton Play
630 They dip their WINGS, and bear some Parts away:
This Sense declares; for often after RAIN,
In one short Night, if WINDS sweep o'er the Plain,
The Dirt grows hard, the Ways are dry'd again.

Besides; as WINDS drive on the low-hung CLOUDS,
635 And make them skim the SURFACE of the Floods,
They take some DROPS away; and these compose
And fall to Earth, in Hail, in RAIN, and SNOWS.

And since the EARTH is rare, and full of PORES,
And Waves still beat against the neighb'ring Shores,
640 As RIVERS run from EARTH, and fill the MAIN,
So some thro' secret PORES return again:
These lose their SALT, and thro' small CHANNELS spread,
Then join where-e'er the FOUNTAIN shews her Head:
Hence STREAMS arise, in fair MEANDERS play,
645 And thro' the VALLIES cut their liquid way.

Now

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nia flumina intrant in mare, & mare non redundat, quoniam ad locum, unde exeunt flumina revertuntur, ut iterum fluant. Eccl. i. And for this reason Homer and the other Poets call Oceanus, not only the Origine and Parent of all Seas, Rivers, Fountains, Lakes, &c. but the Gulph and Tartarus of them all likewise: For all Rivers flow in to that Abyss, and from thence again derive their Origine.

620. Besides, &c.] This second Reason, why the Sea does not in-

crease, the Poet has given already, B. V. v. 300.

629. And then, &c.] This Reason too we have seen before, in B. V. v. 302. and v. 432.

638. And since, &c.] This last and true Reason, why the Sea does not increase, the Poet has likewise given already, B. V. v. 306.

642. These lose, &c.] This and the three following Verses are repeated from B. V. v. 305. Consult the Place, and Notes upon it.

644. Meanders] Of this we have spoken

Now next, why *Ætna* burns, and why the *FLAME*
 Breaks forth in *WHIRLS*, and whence the *FURY* came :
 For sure 'tis fond to think that *FLAMES* arise,
 Directed by the angry *DEITIES*,
 650 To waste fair *SICILY*, and burn, and spoil
 The Farmer's Hopes, and Fruits of all his Toil,
 Whilst all the neighb'ring *NATIONS* stood amaz'd,
 Oppress'd with anxious Fear, and wildly gaz'd :
 The *HEAV'N*, all spread with Flames, they flock'd to view,
 655 And wonder'd what vex'd *NATURE* meant to do.

But

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spoken at large in the Note on
 B. V. v. 308.

646. Now next, &c.] Lucretius having, as he thinks, sufficiently explain'd the Causes of Meteors, of Earthquakes, and of some of the Phænomenons of the Sea, he now endeavours to shew the Causes of the other Wonders of Nature, which he suspects may create a Belief of the Gods, and of divine Providence. And first in 39. v. he disputes of the Fires of Mount *Ætna*, which, says he, tho' they sometimes burst out with great Violence, and lay waste the Island of Sicily, ought not nevertheless so much to surprize us, as to make us foolishly believe they surpass the Strength of Nature. Some may say that the Flames are vast indeed, and their Force wonderful, because they see no other like them; but in many Things we are deceiv'd, by judging over-hastily of them. If we contemplate the infinite Universe, there is nothing that can be said to be great, nothing that deserves our Admiration: For from that Universe may flow, together, on a suddain an infinite quantity of the Seeds of Fire, or of Wind, and they, gathering together in a Body in Mount *Ætna*, or in any other Mountain, may assume Strength and Violence, may cause Earthquakes, may at length burst out, and scatter far and wide, Smoke, Flame, Ashes, and Coals of Fire. But these E-

ruptions are, as it were, the Diseases and Convulsions of this World: And as the Seeds of Diseases may be deriv'd, and flow out of this World into Man, [for we are often in Feavers, our Teeth ache, &c.] so may they likewise out of the Universe into this World: For, to make a Comparison, a Man is in respect to this World, what the World is in respect to the Universe.

Ætna] Of *Ætna*, the greatest Mountain of Sicily, and now call'd *Mongibello*, besides what is contain'd in this Disputation, and the Notes upon it, see B. I. v. 742.

650. Sicily] An Island of Italy, and the largest of all the Islands, in the Mediterranean Sea: being according to the modern Geographers, at least 700 Miles in Compass. See the rest B. I. v. 737.

654. Spread with flames] That Mount *Ætna* throws out Fire, Flames and Ashes, almost all Authors witness; but chiefly St. Austin, lib. 3. de Civitate Dei, cap. 31. in these Words: *Legimus apud eos, Ætneis ignibus ab ipso montis vertice usque ad litus proximum decurrentibus ita fuisse mare, ut rupes exurerentur, & pices navium solverentur. Hoc utique non leviter noxium fuit, quamvis incredibiliter mirum. Eodem rursus ignium aestu tanta vi favillæ scripserunt oppletam esse Siciliam, ut Catanensis urbis*

But if you look about on ev'ry side,
 Consider that the WHOLE's immensely wide;
 Then view the arched SKIES, and see how small,
 And mean a Portion of the spacious ALL,
 660 How little MAN, compar'd to EARTH's vast BALL!
 You then will find your Fears and Cares decrease,
 Your Jealousies, and Admiration cease.
 For who admires to see a PATIENT sweat,
 Or hear him groan, when scorch'd by FEVER's Heat,
 665 Or when the FOOT, or EYE is vex'd with Pains,
 Or any hot DISEASE spread o'er the Veins?
 And this, because there lie vast Stores of SEED
 In HEAV'N, and EARTH, all fit, all apt to breed
 Such strange and vexing PAINS; or else encrease
 670 The noxious FLAME, and feed the strong DISEASE:
 So you may think the MASS sends great Supplies,
 And stores of SEED thro' all our EARTH and SKIES,
 Sufficient

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urbis tecta obruta, & oppressa diruerint, qua calamitate permoti misericorditer ejusdem anni tributum ei relaxavere Romani. We read, says he, that Mount Ætna has cast out Fires with such Violence, that they have flown even to the Sea-side, heated the Waters of the Sea, burnt the Rocks, and melted the Pitch of the Ships: This, tho' incredibly wonderful, must have done much Damage. They write besides, that the Countrey round, is sometimes overwhelm'd with the vast quantity of Cinders it throws out: and that the Roofs of the Houses at Catana [a City ten Miles distant from Ætna] were broken down by the Weight of the Cinders, that fell upon them: insomuch that the Romans, commiserating the Condition of the Inhabitants, forgave them the Tribute of that Year. Thus too, the Mountains, Vesuvius in Naples, Hecla in Island, and Quit in Peru, sometimes eject Coals and Flames. Cicero says, that Mount Ætna has cast out so much Smoke among the Flames, as has

darken'd the Countrey round to that degree, that the Inhabitants, for two Days together could not know one another. Nos autem tenebras cogitemus tantas, quantæ quondam eruptione Ætnæorum ignium finitimas Regiones obscuravisse dicuntur, ut per biduum nemo hominem homo agnosceret, lib. 2. de Naturâ Deorum. And Pliny the younger witnesses in his Epistles, that his Uncle, the great Pliny, was suffocated by the Smoke, Stones and Cinders, that Vesuvius had thrown out. Appian, lib. 5. de Bello civili, adds horrid Noise; and Lucretius takes notice of all these Things, and more, as we shall see by and by.

666. Or any, &c.] Lucret.

Existit facer ignis, & urit corpore serpens
 Quamcunque arripuit partem, repitque per artus.

Where the Poet describes the Disease which the Latines call Sacer Ignis; the Greeks, Ἐρυσίπελας; and we, St. Anthony's Fire. Celsus

Sufficient to raise STORMS, to shake the Frame,
 Raise *ÆTNA*'s Fires, and cover SKIES with FLAME :
 675 For that appears, when SEEDS of FLAME combine,
 As RAIN, and CLOUDS, when DROPS of WATER join :
 You'll say the FIRE's too strong, the FLAME too great :
 A vain Objection this, and Fanny's Cheat :
 Thus he, that views a RIVER, MAN, or TREE,
 680 Or else whatever 'tis he chance to see,
 Strait thinks them great, because, perhaps, he knows
 No larger Streams, no greater Things than those :
 Yet these, and all the spacious SKIES controul,
 Are small, and NOTHING to the mighty WHOLE.
 685 Now why the FLAMES break forth——
 First then, this *ÆTNA*'s Cave's a mighty one ;
 A spacious HOLLOW, and all arch'd with Stone :

This

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sus, lib. 5. cap. 20. calls it an
 ulcerous Disease : *Sacer ignis*,
 says he, *malis ulceribus annu-*
rari debet. Virgil. Georg. 3.
 v. 556.

———— *Contactos artus sacer*
ignis edebat,

But of this Disease, see at large
 Celsus in the Place above-cited,
 and Paulus *Ægineta*, lib. 4. cap.
 20.

674. And cover Skies with
 Flame:] Of the fiery Eruptions of
Ætna, Virgil, *Æneid.* 3. v. 571.

Interdumque atram prorumpit
ad æthera nubem,
Turbine fumantem piceo, & can-
dente favilla :
Attollitque globos flammæ,
& fydera lambit :
Interdum scopulos avulsaque vis-
cera montis
Erigit eructans, liquefactaque
saxa sub auras
Cum gemitu glomerat, fundoq;
exæstuat imo.

Thus render'd by Dryden :

By Turns, a pitchy Cloud she
 roulds on high,
 By Turns, hot Embers from
 her Entrails fly,
 And Flakes of mounting
 Flames, that lick the Sky :
 Oft from her Bowels massy Rocks
 are thrown,
 And, shiver'd by the Force, come
 piece-meal down :
 Oft liquid Lakes of burning Sul-
 phur flow ;
 Fed from the fiery Springs, that
 boil below.

But of these Eruptions, see at
 large Cluverius, de *Siciliâ*, lib. 1.
 cap. 2.

685. Now why, &c.] In these
 30. v. the Poet explains the Rea-
 son, why the Flames, that are ga-
 ther'd together in the Cavities of
 Mount *Ætna*, burst out with so
 great Violence : He says, That
 the Eruption is caus'd by the
 Force of Wind : That the Seeds
 of that Wind come from the in-
 finite Universe, and, gathering to-
 gether in the Mountain *Æt-*
na, drive out either the Flames,
 that lurk within the Bowels of the
 Mountain, or those they strike and
 force

This swells with WINDS, which whirl and tumble there;
(For WIND is nothing else but troubled AIR)

690 When these, by whirling round the arched Frame,
Grow hot, and from the FLINTS strike Sparks of Flame,
Then, proud, and furious too, and rising higher,
Break forth at Top, in SMOKE, and SPARKS of Fire :

By

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force out from the very Stones of it : Or else, that Wind rushes in at the Hollows, that are at the Foot of the Mountain, and whose Entrances are open, when the ebbing Sea leaves the Shore (for the Sea washes the Foot of the Mountain) and blows out the Flames. Lastly, he says, that Winds are bred in the very Hollows of the Mountain. And then he tells us, he gives many Reasons, that among them, one at least may be true and certain.

By the Wind that rages within the Caverns of Ætna, may be understood the sulphurous and bituminous Exhalations, which are continually generated, and agitated within those Hollows; and which, when they can no longer, by reason of their great quantity, be contain'd within them, break their Prison, and burst out in Flames. Thus Trogus in Servius on the third Æneid : *Nam Sicilia terra cavernosa & fistulosa : Quo fit, ut ventorum flatibus pateat ; unde ignis concipitur : Intrinsecus sulphur habet & bitumen ; in quæ ubi ventus per spiramenta cavernarum incubuit, diu luctatus, ignem concipit : Sic Ætnæ durat incendium.*

689. For Wind, &c.] There are three Opinions concerning the Wind. I. Aristotle, Meteor. lib. 2. and Theophrastus, as Olympiodorus, in 1. & 2. Meteor. witnesses, held the Matter of Winds to be an Exhalation arising out of the Cavities of the Earth. And this Opinion most of the Philosophers, since them, have follow'd. II. Others ascribe

the Origine of Winds to the Water : as Metrodorus, who in Plutarch de Placit. 37. defines Wind to be an Ebullition, or violent surging of a watry Vapour ; and Vitruvius, who, lib. 3. c. 6. calls the Wind, *Aëris fluens unda, cum incertâ motûs redundantia*. III. And others, held the Wind to be only an Agitation of the Air. Of this Opinion was Hippocrates, lib. 1. de flatibus, where he calls it a violent Flux and Motion of the Air. And with him agree Anaximander in Plutarch 3. de Placit. Philosoph. 7. Anaxagoras in Laërtius, Seneca, lib. 5. c. 1. & 6. and Lucretius in this Place. But the Opinion of Aristotle is chiefly follow'd : And 'tis generally held, that in those Concavities of the Earth, when the Exhalations, which Seneca calls subterranean Clouds, overcharge the Place, the moist Vapours turn into Water, and the dry into Wind : and these are the secret Treasures, out of which God is said in the Scripture to bring them. This too is what the Poets meant, when they feign'd, that Æolus kept the Winds, imprison'd in a vast Cave. Thus Virgil, Æn. 1. v. 56.

———— Hic vasto Rex Æolus
antro
Luctantes ventos, tempestatesque
sonoras
Imperio premit, ac vinclis & carcere frænât.

Upon which Seneca seems too critical, when he says, *non intellexit, nec id quod clausum est, esse*

By the same Force, ev'n weighty MOUNTAINS rise,
695 And whirling ROCKS cut thro' the wounded Skies.

But more: this hollow, fiery MOUNTAINS Side
The SEA still washes with impetuous Tide,
And, passing thro' the PORES, the FLAME retires;
The pressing WATERS drive the yielding FIRES,
700 And, force them out; these raise large Clouds of Sand,
And scatter STONES, and ASHES o'er the Land.

And

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esse adhuc ventum, nec id quod ventusest, posse claudi: nam quod in clauso est, quiescit, & aëris statio est: omnis in fuga ventus est. For tho' it get not out, it is Wind as soon as it stirs within, and attempts to do so. Juvenal in his fifth Satire describes very well the South Wind in one of these Dens:

— Dum se continet Auster,
Dum sedit, & ficit madidas in carcere pennas.

See more above in the Note on v. 452. where we have already spoken of the Cause of Wind.

694. By the same Force, &c.] Milton in the first Book of Paradise Lost:

— As when the Force
Of subterranean Winds transports a Hill
Torn from Pelorus, or the shatter'd Side
Of thund'ring Ætna, whose combustible
And fuel'd Entrails thence conceiving Fire,
Sublim'd with min'ral Fury, aid the Winds,
And leave a sing'd Bottom, all involv'd
In Stench and Smoke.—

696. But more, &c.] In these 6. v. the Poet subjoins another peculiar Cause, why Ætna vomits Flame: and says, that the Sea washes the Foot of the Mountain; and entering into the Cavities where the Fire is conceiv'd,

the Flames yield to the driving Flood, which compels them to belch themselves out at the breathing Holes on the Summit of the Mountain. Our Translatour has totally omitted the two last Verses of this Argument, which in the Original are as follows:

In summo sunt ventigeni crateres,
ut ipsi
Nomitant, nos quas fauces perhibemus & ora.

i. e. On the Top of the Mountain, there are certain Crateres, for so the Greeks call them, Basins or Cisterns, but we, the Latines, call them, Fauces and Ora, Mouths and Jaws. Now the Apertures of Ætna were call'd Crateres, because thro' them Winds are almost continually issuing out of the Bowels of the Mountain: Of this no Man can doubt, if any Credit may be given to Strabo, who, in lib. 6. has these Words: "Ουτε γὰρ θεωρεῖν εἶναι τὸ τόπον, ἔθ' ὁράειν. Εἰκάζειν τὸ μὴ δὲ κατὰ ῥίφθῃναι τὴ δύναμιν ἐκείσε, ὑπὸ τῇ ἀνιπνοίας τῶν ἐξ βάθους ἀνέμων, ἢ τῇ θερμότητι, ἢν θεωραπαιῶν εὐλογον πόρρωθεν, πρὶν ἢ πρὸς σελίω τῇ κρατῆρι θεωρεῖσθαι. εἰ δὲ κατὰ ῥίφθῃναι, φθάνοι ἀνὰ λαφθαρέν πρὶν ἀναρρίφθῃναι πάλιν, ὅποιον παρελήφθῃ θεωρεῖσθαι. τὸ μὲν ἐν ἐκλείπων, ποιεῖ τὰ πνέματα ἢ τὸ πῦρ, ἐκλείψεως πότε δὲ ὕλης, ἔκ ἀλογον. ἢ μὲν ἐπὶ

T t t t

ἐπὶ

And thus my MUSE a Store of Causes brings;
 For here, as in a thousand other Things,
 Tho' by one single CAUSE th' EFFECT is done,
 705 Yet since 'tis hid, a thousand must be shewn,
 That we may surely hit that single one.
 As when a CARCASS we at Distance view,
 We all the various MEANS of DEATH must shew,
 That in the NUMBER we may speak the true:
 710 For whether he was kill'd by strong DISEASE,
 Or COLD, or SWORD, tho't was by one of these,

We

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ἐπὶ τοσαύτῳ γέ, ὥς ἔστι ἀντὶ τῶ
 σαύτης βίας, ἐφικτὸν ἀνθρώπῳ
 γενέσθαι τὴν πωλισιασμόν. that is to
 say, For that Place can neither be
 approach'd, nor look upon, and
 that he conjectur'd, even that no-
 thing could be thrown in it, be-
 cause of the opposite Blast of the
 Winds and Heat, that come from
 the Bottom: which, 'tis proba-
 ble comes from far, before it ap-
 proaches the Mouth of the Cra-
 ter: But if any thing were cast
 in, the Figure it had, when in-
 jected, would be chang'd long be-
 fore it was thrown out again: Be-
 sides, that it is not absurd to say,
 that if the Matter for some time
 fail, the Wind and Fire cease for
 some time likewise: but that that
 Intermision is not so great, that
 any Man can approach near, and
 place himself against that Force.
 Apuleius likewise retains the
 Greek Word, and calls the
 Mouths or Apertures, by which,
 Flames, Smoke, Stones, Coals of
 Fire, &c. belch out of this Moun-
 tain, Crateres: Ex Ætnæ cervici-
 bus quondam effusis crateribus
 per declivia, incendio divino, tor-
 rentis vice, flammarum flumina
 concurrerunt. Apul. lib. de Mun-
 do, pag. 73. Now what Lucre-
 tius says in these two Verses, is:
 That the Wind enters into the
 Caverns, not only at the Aper-
 tures in the Foot of the Moun-
 tain; but is generated in the

Mouths, and breathing Holes on
 the Top of it. Nor, indeed, is
 this in the least improbable, since
 nothing is more certain, than that
 Air rushes on all sides to Flame,
 and that Wind is thence generated.
 Thus Creech himself upon this
 Passage.

702. And thus, &c.] In these
 13. v. the Poet makes an Excuse
 for his having assign'd so many
 Causes: but, says he, this is the
 safest Way of proceeding in
 doubtful Things: and among
 them all, some one may, perhaps,
 satisfy the Reader: and lastly,
 he confirms this Method by a Si-
 militude. We may observe that
 Lucretius takes no notice of the
 Snows, that are continually lying
 on the Top of this Mountain:
 It is nevertheless very extraordi-
 nary, that Snow and Fire should
 inhabit so near each other: and
 many of the Antients mention it
 as such: particularly Pindar,
 Od. 1. Pyth. Solinus, cap. 11.
 and Claudian, who, in 1. Rapt.
 Proserp. says;

Sed quamvis nimio fervens exu-
 beret æstu,
 Scit nivibus servare fidem; pari-
 terque favillis
 Durescit glacies, tanti secura va-
 poris,
 Arcano defensa gelu, fumoque
 fideli
 Lambit contiguas innoxia flam-
 ma pruinas.

Thus

We can not tell ; and thus it must be done
In other Things, a THOUSAND Reasons shewn,
When SENSE determines not our Choice to ONE.

715 In Summer NILE o'erflows ; his Waters drown
The fruitful EGYP'T's Fields, and his alone :

Because

N O T E S.

Thus too Silius Italicus, lib. 14.
Summo cana jugo cohibet, mira-
bile dictu,
Vicinam flammis glaciem, æter-
noque rigore
Ardentes horrent scopuli ; stat
vertice celsi
Collis hyems, callidaque nivem
tegit atra favilla.

And this Description of the
Neighbourhood of Fire and Snow
upon Mount Ætna, Cowley has
imitated from those Poets, in his
Pindarick Ode to Hobbes.

So Contraries on Ætna's Top
conspire ;

Here hoary Frosts, and by them
breaks out Fire :

A secure Peace the faithful Neigh-
bours keep :

Th' embolden'd Snow next to the
Flame does sleep.

Tacitus says the same of Mount
Libanus, and uses the like Ex-
pression. Præcipuum, says he,
montium Libanum, mirum dictu,
tantos inter ardores opacum, fi-
dumque nivibus ; shady in the
midst of such great Heats, and
faithful to the Snow : but these
Expressions are too poetical for
Prose, and become the Poets, bet-
ter than the Historian. See like-
wise Seneca, Epist. 79.

715. In Summer, &c.] From
the Summer Solstice to the Au-
tumnal Equinox, the River Nile
swells to such a degree, that it
overflows the Countrey of Egypt,
and, covering the Fields with a
slimy Mud, manures and renders
them fruitful, tho' without it
they would be barren, and pro-
duce nothing. A manifest and
wonderful Monument of Divine
Providence! Ægypti incolæ a-

quarum beneficia percipientes, a-
quam colunt, says Julius Firmi-
cus de Err. Prof. Rel. The E-
gyptians, perceiving the great Be-
nefits of this Inundation, worship
the Water. Lucretius, according
to his Custom, assigns natural
Causes for the overflowing of this
River : And first in 10. v. says,
that the Etesian Winds, which
blow from the North, repel and
drive back the Stream of the
River, that comes from the South,
and are the Cause that it fills up
its Channel, and overflows its
Banks. Now if it should be ob-
jected, that the Etesian Wind,
for Winds are light Bodies, is too
weak to stop so great a Weight of
Waters, he adds in 5. v. that the
Sands, which the Sea, being agi-
tated by those Winds, casts into
the Mouths of the Nile, choak
them up, and thus cause the In-
undation. To these he adds two
other Causes: the Rains that fall
at the Sources of the River, in
3. v. and the melting of the
Snows, in 2. v. For all these
Causes conspiring, will make the
Nile, or any other River, over-
flow.

Thales Milesius held the first of
these to be the true Cause of the
overflowing of the Nile ; nor
does Philo the Jew, lib. 1. de vit.
Mos. nor Pliny, lib. 5. cap. 9.
disapprove of his Opinion. Eu-
thymenes likewise in Seneca, l. 4.
Nat. Quæst. c. 2. ascribes the
Cause of the overflowing of this
River to the Etesian Winds: for
he believes that the Nile increases
by means of the Waters of the
Atlantick Sea, which the Etesias
drive into the Channel of the
River. These are his Words:

T t t t 2

Inde

Because the MOUTH of that wide RIVER lies
 Oppos'd to NORTH: for when th' ETESIAs rise
 From heavy northern Clouds, and fiercely blow
 720 Against the STREAMS, these stop, and rise, and flow.
 For NORTHERN Winds blow full against the Streams,
 Their Spring is SOUTH, it boils with Mid-day Beams;
 Then

N O T E S.

Inde, [from the Atlantick Sea] enim Nilus fluit major, quamdiu Etesia tempus observant; tum enim ejicitur mare obstantibus ventis: cum resederint, pelagus conquiescit, minorque discedenti inde vis Nilo est; Cæterum dulcis mari sapor est, & similes Niloticæ belluæ. But this Reason is good for nothing. For sometimes the Nile increases before the Etesias blow, and decreases even while they are yet blowing: Nay, tho' they blow exactly contrary to the Stream, the Nile nevertheless runs into the Sea. Besides; why does not the like happen to other Rivers that run against the Etesian Winds? But the Truth is, those Winds are unable to keep back, much less to repel, the Current of that River.

In Summer] For the Nile never begins to swell till after the Sun has enter'd into Cancer: which is about the eleventh of June. Thus Manilius, lib. 3. v. 630.

Nilusque tumescit in
 arva,
 Hic rerum status est, Canceri cum
 sydere Phœbus
 Solstitium facit, & summo ver-
 satur Olympo.

The Reason of which we will give
 by and by.

The Nile o'erflows, when with
 exalted Ray,
 In Summer Solstice, Phœbus
 bears the Day
 Thro' Cancer's Sign, and
 drives the highest Way.

Creech.

718. Etesias] Aristotle, lib. 2. de rebus superis: οἶδε Ἐλεσίαι ανέμοι μὲν πρόπας, καὶ κυνὸς ἐπιτολήν. The Etesians blow after the Solstice, and the rising of the Dog-Star: And this Wind continues generally for eleven or twelve Days. They are call'd Etesias, from the Greek Word ἔτος, which signifies a Year, as who should say Annual, because they blow constantly at a certain Season of the Year: Strabo calls them Subsolanos, Eastern Winds; But Pliny, lib. 2. cap. 47. Post biduum exortus Caniculæ Aquilones constantius perflant diebus quadraginta, quos Etesias vocant. When the Dog-Star has been two Days risen, the Northern Winds, call'd Etesias, blow constantly for forty Days together. And Lucretius himself says, v. 720. The Etesias bear the northern Vapours; which shews the Mistake of Fayus, who takes it for a South Wind.

722. Their Spring, &c.] Many of the Antients despair'd, that the Source of the Nile would ever be discover'd: Hence Ammianus Marcel. lib. 22. Origines fontium Nili, sicut adhuc factum est, posteræ quoque ignorabunt ætates: Hence too those Complaints of the Poets, Tibull. lib. 1.

Nile Pater, quamvis possum te
 dicere causa,
 Aut quibus in terris occuluisse
 caput?

Claudianus, Epigr.

Secreto de fonte cadens, qui semper inani

Quærendus

Quærendus ratione licet; nec contigit ulli
Hoc vidisse caput: fertur sine teste creatus.

And Lucan, lib. 10.

Arcanum Natura caput non protulit ulli,
Nec licuit populis parvum te, Nile, videre.

And again,

————— Ubicunque videris,
Quæreris, & nulli contingit gloria genti
Ut Nilo sit lata suo —————

Hence Homer calls the Nile *διπτερά ποταμός*, the River sent down from Heaven. And Diodorus, lib. 1. tells us, that the Inhabitants of Meroe call it in their Language *Astapoda*, that is to say, dark or obscure. Herodotus, after he had travell'd four Months in search of the Fountain of this River, stopt in his Journey, being told by the Egyptians that it flow'd from beyond the Island of Mero. Ptolomy Philadelphus sent Persons on purpose to discover the Source of it, but without effect, as Strabo witnesses, lib. 17. and Lucan says, that Alexander the Great sent on the same Errand, but his Messengers had the like Success. Pliny, lib. 6. c. 6. says, that Nero sent two Centurions, and that when they came back, he heard them say: *Ad ulteriora quidem pervenimus, ad immensas paludes, quarum exitum nec incolæ noverant, nec superare quisquam potest.* The sacred Authors believ'd the Nile to arise in the terrestrial Paradise. Pomponius Mela thinks it rises at the Antipodes. Euthymenes in Seneca, lib. 4. c. 2. and in Plutarch 4. Placit. 1. brings it out of the Atlantick Sea: Pliny from a Mountain of the lower Mauritania: and Ptolomy from two Lakes beyond the

Equinoxial Line. And Vossius, de *Ætat. Mund.* and in Melam, observes, that before the Discovery of the Indian Ocean, many of the Antients were so ignorant, as to believe, that the Nile deriv'd its Source from the utmost East, even from India itself. With which Errour, not to mention many others of the Antients, Virgil seems to have been tainted: as appears, Georg. 4. v. 290.

Quaque pharetratae vicinia Persidis urget,
Et viridem Ægyptum nigra fecundat arena,
Et diversa ruens septem discurrit in ora,
Usque coloratis amnis devexus ab Indis.

Thus various were the Opinions of the Antients, and none of them true; for the Nile is now known to arise on the South of a great Lake call'd Zambre, at the foot of the Mountains, call'd the Mountains of the Moon, *Lunæ Montes*, which are in the Province of Guyoma, a Countrey inhabited by the Æthiopian Abyssines. And one of the Titles of Prester John is, King of Guyoma, where Nile begins: but of this the Antients were totally ignorant, insomuch that it was reckon'd among the famous Proprieties of that River, that it conceal'd its Spring: *Fontium qui celat origines.* And indeed the Nile is incomparably the most famous River in the whole World, whether we consider the Largeness of it, and the Length of its Course, for it runs about 900 German Miles, or the Things that it produces, and its miraculous overflowing, and returning again within its Banks. Seneca, lib. 4. Nat. Quæst. cap. 11. says it brings both Water and Earth too, to the thirsty and sandy Soil: for, flowing thick and troubled, it leaves, as it were, all its Lees in the Clefts of the parch'd and gaping

Then cuts its way thro' Sun-burnt NEGROE'S Land,
 And hisses, passing o'er the fiery Sand.
 725 Or else the troubled SEA, that rolls to SOUTH,
 Brings heaps of Sand, and choaks the RIVERS Mouth:
 These

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gaping Ground, and spreads the dry places with the Fatness it brings with it; and thus does good to the Countrey two ways, both by overflowing and manuring it: For this reason Herodotus calls it Ἐργαλίον, the Husbandman. Tibullus.

Te propter nullos tellus tua postulat imbres;

Arida nec pluvio supplicat herba Jovi.

And Lucan says that Egypt has no need of Jupiter:

Nil indiga mercis
 Aut Jovis; in solo tanta est fiducia Nilo.

And one in Athenæus yet more bold, calls it the Egyptian Jupiter, Αἰγυπία Ζεῦ Νεῖλε. Nay, the Egyptians themselves call'd it ἀντίμομος τῷ ἑρᾶντι, the River that emulates and contends with Heaven: And even in the Scripture itself it is call'd absolutely Nachal Misraim, the River of Egypt: From whence the Word Nile may not unnaturally be deriv'd, Nahal, Naal, Neel, Neil; as Bahal, Baal, Beel, Bel, βῆλ. And Pomponius Mela, lib. 5. cap. 10. reports that the Fountain of Nilus is call'd Nachal by the Ethiopians. The learned Mauffacus, upon Plutarch de Fluv. and Mont. nominibus, has collected the several Names that were given by the Antients to this River. It was first of all call'd Oceanus, or, (but as he says, barbarously) Oceames: then Aëtos, or Aquila, and Me-

las, from its Depth or Profundity, because all deep Waters seem black; or from Melas, the Son of Neptune: Afterwards Ægyptus, either from Ægyptus, the Son of Belus, or of Vulcan and Leucippes, who threw himself into it, or ὡς τὸ αἶγας πιδάμειν, from fattening of Goats; From whence likewise the whole Countrey of Ægypt seems to be, so nam'd. The Hebrews call it Gehon, and Schior, the last of which signifies black, or troublous, and from hence perhaps came its Æthiopian Name, Siris. It was also call'd Νῆς; or Nus, and Triton; and last of all Nilus, either from what we said before, or from Nilus, the Husband of Garmathones, a Queen of Egypt; or else from Nilus, the Son of Cyclops, or Nileus or Nileus, Ægyptian Princes: or lastly, and rather than all the other, ὡς τὸ νέαν ὑλὴν ἄγειν, from bringing new Mud or Slime. By the Latins it was peculiarly call'd Melo, as is evident from the Testimonies of Ennius, Festus, Servius, and Aufonius.

723. Sun-burnt Negroe's Land] He means Æthiopia, in the South Parts of which Countrey the Nile arises. Manil. lib. 1. v. 44.

— Gentes, in quas & Nilus inundat.

Qua mundus reedit, & nigras superevolat urbes.

725. Or else, &c.] This reason is mention'd likewise by Pomponius Mela; and that too with a seeming Approbation of it.

These stop the headlong Floods ; they strive in vain
To force a Way, but weary'd turn again,
And break their BANKS, and flow o'er all the Plain.

730 Or else RAIN makes it swell; th' ETESIAS bear
The NORTHERN Vapours thro' the SOUTHERN Air :
These thicken'd round the Hill, the RAIN compose.
Or else the SUN melts ETHIOPIAN SNOWS ;
These swell the RIVER, and the Water flows.

Next

NOTES.

730. Or else, &c.] There were three Parties, who favour'd this Opinion. I. Democritus ; who held, that Exhalations arise from the melted SNOWS in the northern CLIMATES, and being driven by the Etesian Winds into Æthiopia, they dash against the Mountains, where they stop and thicken into Rain. This Opinion Lucretius here approves. II. The Philosophers of Memphis, now call'd Grand Cairo, who, as Diodorus witnesses, held that the Nile flows out of the temperate Southern Zone : and that, since it is Winter in those Countries when it is Summer with us, that River swells by reason of the frequent Rains that fall near its Fountain, during the Winter of those Southern Regions. III. Agatharchides, who, as the same Diodorus reports, held that the Nile is increas'd by the great Rains that are continually falling all the Summer long in the Mountains of Æthiopia. And to strengthen the Probability of

this Opinion, he urges, that during the whole Summer, it rains about the River Hydaspes, snows on Mount Caucasus, and hails in many Parts of India.

733. Or else, &c.] This Opinion is ascrib'd to Anaxagoras, who believ'd, that the Nile swells by means of the SNOWS that are melted during the Summer in the Mountains of Æthiopia. But that this Belief is erroneous, Herodotus gives these Reasons : Because those Countries are very warm, and consequently exempt from SNOWS : Nay, even the very Air is always hot : Besides, the Sun is very remote from those Regions, when the SNOWS must be melted to swell that River.

Æthiopian] Æthiopia is a vast Region of Africa, that borders upon Egypt : The Countrey of the Abyssines. It lies beneath the Torrid Zone, extended from the Tropick of Cancer to beyond the Æquator. The River Nile cuts its way almost thro' the middle of it, as it does thro' Ægypt.

TO

OF THE Annual Inundation

OF THE River NILE.



THE constant and annual Increase of the Nile has long and much employ'd the Thoughts of the Studious: and that too not without reason; for many Things occur'd, that deservedly claim'd their Admiration. Among others, not the least is this, that it constantly overflows about the middle of June, or rather a Day or two after; some positively fix it to the time of Sun-rising on the seventeenth of that Month: besides, it gives before-hand such certain Tokens, to what Height the Flood will rise, that they, whose Business it is to discover it, are never deceiv'd in their Conjectures, whether they weigh the Sand in a Balance, or measure the future Inundation by a Rule, which they call a Niloscope. The Event is certain, the Cause doubtful: For it is controverted, whether the swelling of the River is occasion'd by its Mouths being stop't and choak'd up; or by the Rains that fall in Æthiopia, and by the melted Snows of the Mountains of that Countrey; or, lastly, by the Water of the Sea, driven into the Channel of the River, by the Etesian Winds: And here we may not omit an Egyptian Erudition, which we find in Horus Apollo, touching the Symbols of the Nile: *Tres porro Hydrias, nec plures, nec pauciores pingunt, quod triplex ex eorum sententia fit inundationis causa effectrix: unam quidem Ægyptiæ terræ ascribunt, quæ ex sese aquam producit: alteram Oceano, ex quo, inundationis tempore, aqua in Ægyptum exæstuat: tertiam imbribus, qui, per id tempus, quo intumescit Nilus, ad Austrinas Æthiopiæ partes contingunt.*

gunt. The Egyptians, says he, make three Water-pots, neither more nor less, because in their Opinion there are three efficient Causes of the Inundation: One of them they ascribe to the Land of Egypt, which produces Water out of itself: another to the Ocean, out of which, at the Time of the Flood, the Water surges into Egypt: the third to the Rains, which, at the time when the Nile swells, happen in the Southern Parts of Æthiopia: As to the first of these Reasons, it is evidently false: for the parch'd and thirsty Soil of Egypt gapes indeed for Moisture; but in no part of the Countrey does the Land ooze out Water: Nor can we judge more favourably of the second, when we consider the Difference between the Sea-Water, and that of the River Nile: And as for the Rain, which they assign for the third Cause, we will speak of that by and by: Mean while we will observe, that those Mounds of Sand, with which they dam up the River, are soon borne down, and wash'd away by the never-ceasing Course of the Stream: and, what is chiefly to be consider'd, if any Let or Opposition whatsoever were the Cause, that the Nile, by retrogression, overflow'd its Banks, the Waters of that River would be observ'd to rise first in the lower part of the Countrey, that is to say, from the Mediterranean to Cairo, rather than on the contrary, in the more Inland Parts of it: but that it does so, is allow'd by the unanimous Consent of all. We must therefore travel out of Egypt, for the Cause of this Inundation. No doubt but a plenteous Accession of Waters swells the River, before it washes the Land of Egypt: And this it was that perswaded some to believe [see the Note on v. 733.] that the Nile increases by means of the Snows, that melt in Æthiopia. And indeed they are certainly mistaken, who hold with Herodotus, that it never snows in that Countrey: For they go contrary to Experience and Observation: Neither are those others to be credited, who assert, that at the Season when the Nile inundates the Land of Egypt, it is the Depth of Winter in Æthiopia. For who can believe that the Snow, which was congeal'd by Cold, can be dissolv'd by Cold likewise? This would be repugnant to the Laws of Nature, who has ordain'd, that Things congeal'd by Cold, shall be melted by Heat. The third Cause is assign'd to Rain, [see the Note on v. 730.] and to this adhere the Authours of greatest Note, tho' it has been long, and strenuously oppos'd by some of no mean Reputation: They, who call it in Question, object the great Heat of the Countrey, and the

U u u u

Scarcity

Scarcity of Vapours: but there are several Things, of which these Persons ought not to be ignorant: The first is, that, in those Countreys, there are two Winters, and as many Summers, in the Year; tho' of unlike Effect indeed, if compar'd with ours. The Winter is more severe with us; but not so mild with the Æthiopians, as not to produce Snows in the Mountains, together with constant Rains, that continue for forty Days; as is affirm'd by the Natives, as well as by Travellers into those Parts. This Truth Democritus learnt in his Travels, and, as by Tradition, deliver'd it down to Posterity, till at length it became known in Italy, by the Care of our Lucretius. Besides: In Summer, the Sun is nearer to Æthiopia, than it is to us; and his Rays, tho' troublesome to the Inhabitants, yet suffer themselves to be overcast by a very thick Mist, that hangs over a certain Mountain, which Mariners call Serra Leone, perhaps from the Noise it makes: for it generally roars, and from the dusky Mist almost continually darts out Lightning, together with dreadful Thunder, that is heard forty Miles around. And a Master of a Ship, as he was sailing to the Island St. Thomas, observ'd, that all this happen'd, when the Sun struck perpendicularly on Æthiopia. Let such then, as object the Heat of the Countrey, make the most of that weak Argument: nor will they fare better, who deny Vapours to that Region. For they ought to reflect on the Lakes and Rivers, that Africa contains; and to have some regard to the Ocean that washes its Coasts: all which may furnish an immense quantity of Matter for future Rain; and then especially, when the Sun, retiring, permits the inferiour Elements to extend their own Bounds: The Mediterranean too conduces something to increase the store, by gratefully sending into Æthiopia a vast quantity of Clouds, which the Winds, that arise in Greece, bear thither: This, Prosper Alpinus, who was himself an Eye-witness of it, relates in these Words. *Cayri, in toto fere augmenti fluminis tempore, Eresia, perflantes singulis fere diebus ab orto sole, usque ad meridiem, multas nubes nigras, crassas, pluviosas in altissimos usque Libyæ, Æthiopiæque montes, propellunt atque asportant: in quibus Montibus hæ concrecentes, in pluvias vertuntur, quæ, ab his in Nilum cadentes, sunt causæ ipsius augmenti. Observatur quotidie Cayri, dum flumen hoc augetur, qua die multæ nubes supra Ægyptum versus Meridiem à septentrionalibus ijs ventis asportatæ transferint, multum flumen augeri; atque ex contrario, clara apparente die, nullisque nubibus*

in eo cœlo apparentibus, parùm crescere: Et hæc eos nunquam fallit observatio, Lib. i. de Medic. Ægypt. At Cairo, says he, during almost the whole Time of the swelling of the River, the Etesias blow almost every Day, from Sun-rising till Noon, and bring, and drive before them, many black, thick and rainy Clouds into the high Mountains of Libya and Æthiopia: In which Mountains, these Clouds gathering together, are turn'd into Rains; which, falling from thence into the Nile, are the Cause of its Increase: It is observ'd every Day at Cairo, that so long as this River is increasing, on what Day soever many Clouds are brought by those Northern Winds, and carry'd over Ægypt towards the South, the River that Day swells very much: and, on the contrary, that in a clear Day, when no Clouds appear in the Sky, it increases but little. And this Observation never fails them. It is credible enough, that when the Clouds are come into Africa, they are resolv'd into Rain; not that, as Lucretius thought, it is squeez'd out of them, as Water out of a sponge; but because, by reason of the Cold of the Place, the included Fire of the Clouds flies away, or is extinguish'd; and then the Vapours grow thick, and return into their former Nature. But on what Day the Rains begin to fall, and how much time the Waters take up in their Course, while they are flowing into the Nile, has not been inquir'd into, or at least is doubtful: But this in our Age we know for certain, that these Things happen in the Kingdom of Guyoma, which is subject to the Emperour of the Abyssines. Hence the great Hospitality of the Ægyptians to the Abyssines, that come to sojourn among them; not so much out of Gratitude, as for Fear of a Famine and general Inundation: For the Monarch of Æthiopia, whom we commonly call Prester John, commands the Cataracts of the Nile: for which reason the Emperour of the Turks pays him a yearly Tribute, on Condition, that he do not divert the Waters of the Nile, nor suffer them to come in too great a Quantity, either of which would be the Destruction of Egypt. Hence in the last Age sprung up a cruel War, as Natalis Comes relates. In the Year 1570. says he, Selim Emperour of Constantinople, who was then at War with the Venetians, receiv'd an unfortunate Piece of News: For David, the Great King of Æthiopia, whose Empire extends from the Equinoctial, almost to either Tropick, since many Kings are subject to him, had begun to destroy, by an Inundation of the River Nile, the City of Cairo, and all the neighbouring Countrey of the

Turks, together with many other Cities thereabouts: The reason of this Hostility was, because Selim ow'd him 400000 Crowns for two Years Tribute: for he paid him 200000 a Year: Now the Countrey of Egypt has not Rain enough to render the Land fertile; for it rains there very seldom, and the Soil is of all others the most fruitful; and owes its Fertility to the Waters of the Nile, which are in the Power of the King of the Abyssines, who can send them down in what Quantity he pleases, and either refresh the thirsty Land with a gentle Flood; or, by cutting certain Dykes, pour in such an Inundation, as will lay waste the whole Countrey. Now the Sultan, because he would not pay the Tribute, that was due, levy'd a great Army, and, invading Arabia, put all to Fire and Sword. Thus Natalis Comes, Histor. lib. 23. But more prudently Osiris, who, if we may give credit to Diodorus Siculus, lib. 6. cap. 2. when he was in the Mountains of Æthiopia, mounded up the Banks on either side the Nile, that the Inundation might not be too great; and made Sluices to let in only such a Quantity of Water, as would be necessary for the Fertility of the Land: The Increase of the Nile therefore is more due to Rains than melted Snows; whatever Anaxagoras say to the contrary: And indeed the true Cause of the overflowing of the Nile is only the great Rains, that constantly fall in Æthiopia, from about the beginning of June, to the Month of September: This is testify'd by Alvarez Fernandus, and many others of late Date: And, in Confirmation of their Opinion, it is observ'd, that the River Niger swells at the same time, and never fails to increase, when the Nile does: And that the Rains, which fall in Æthiopia, are the Cause of the swelling of the River Niger, is certain beyond Dispute: Nor was this unknown to Pliny, who, lib. 5. cap. 8. says, *Nigro fluvio eadem natura quæ Nilo*. Besides: the Reed Papyrus grows on the Banks of both those Rivers, and they produce the same Sorts of Animals. See Gassendus, p. 1084. on the tenth Book of Diogenes Laertius.

Prosper Alpinus proposes two Problems concerning the Nile, but despairs of the Solution of either of them: I. Why that River constantly swells the seventeenth of June at Sun-rising? II. How, by weighing the Earth, or Sand of the River, the Inhabitants foretel the Measure and Degree of its Increase? For, says he, in the Month of June, several Days before the Sun's accession to the Tropick, they take some of the Sand of the River, that has been kept and dry'd for a whole

whole Year before ; they weigh this Sand in Scales, and, by adding or subtracting, make the Number of the Weights answer exactly to the Drachms of the Sand : for Example, let us suppose the Sand to weigh three Drachms, which they lay by, and keep in a dry Place, close shut up on all sides : this they weigh every Day, and observe it nothing increas'd or diminish'd in Weight, till the seventeenth Day of June ; on which Day they find its Weight augmented : and from the Weight, more or less increas'd, they foreknow that the River will be more or less augmented likewise : and from the Knowledge of the exact Increase of the Weight, they know for certain before-hand, how many Cubits the River will swell that Year : The Cause whereof, says the same Alpinus, I can not conceive, can be discover'd by natural Principles. His very Words are as follows : *Nam mense Junio, ante solis ad Tropicum accessum, multis diebus Ægyptij terram illiusce fluminis toto integro anno adservatam, & siccata, arefactamque accipiunt, quam lance expendunt, faciuntque ut ponderum Numerus, addentes, ac subtrahentes, drachmis sedulo respondeat : ut exempli gratia, terra sit trium drachmarum pondere, quam in loco sicco, undique concluso reponunt, & conservant : quotidieque librantes, ipsam observant nihil auctam, nihilque imminutam pondere esse, usque ad diem decimam septimam mensis Junij, in qua die auctam ipso pondere inveniunt ; ex cujus pondere, multum vel parum aucto, multum vel parum flumen illud auctum iri prænoscent : à diligentique peraukti illius ponderis notitia, quotis etiam Cubitibus ipsum sit augendum, certo prænoscent. Quorum causas naturalibus principiis posse cognosci, nullo modo fieri posse arbitror.* However, it is not forbid to inquire into this Matter : Now Seneca acquaints us ; that in the tenth and eleventh Year of Queen Cleopatra, the Nile did not increase at all ; which, he also tells us, on the Authority of Callisthenes, had happen'd in former Ages for nine Years together : Of this Ovid was not ignorant, when he sung :

Dicitur Ægyptus caruisse juvantibus arva

Imbribus, atque annis sicca fuisse novem.

Let this suffice for the Inconstancy of its Increase : and as to the uncertainty of the Time, there was a remarkable Delay of it in the Reign of the Emperour Theodosius, which is recorded by Nicephorus and Sozomen. Nor can that be imputed to the want of Rain : For the Nile, not long after
swell'd

swell'd to such a Degree, that the highest Parts of Egypt were cover'd with the Inundation: Now tho' these Events happen but seldom, yet they are sufficient, if not to destroy, at least to render suspected, that generally believ'd Constancy of Time: Let us nevertheless grant Alpinus, what he for seven Years successively observ'd with great Diligence and Sedulity: the rather, because it is not civil to distrust, or derogate from, the Testimony of an Eye-Witness: The Question is: Why the Nile begins every Year to increase, for the most part, at a certain Day? The Cause must proceed from the constant and certain Return of the Season, which the invariable Constitution and Revolution of the Heavens have prescrib'd them: For, since the Sun is at that time at his remotest Distance from Æthiopia, nothing can hinder the Vapours from coming to a Consistency, nor from condensing into Rain, because the ambient Air is chang'd from Hot into Cold, at least has lost its Effervescency. And the Winds, that blow from the North, can not there, as they frequently do with us, hasten the Winter; for in that scorching Climate, the Matter of the Winds is soon dissolv'd, and their piercing Nature qualify'd immediately. And so much for the Solution of the first Problem: The other is not so difficult, tho' at first sight the Cause of it seem obscure. For the Sand, that has been long kept for the sake of making the Experiment, being grown thorough dry, and, as I may say, thirsty, does, when it is expos'd to the surrounding Air, attract to itself the Moisture, with which that Air is newly grown damp, and the Weight of the dry Body is increas'd in proportion to the Degrees of its Dampness: And that the near approaching Waters of the Nile taint the Air with humidity, the Sagacity of the Birds in Egypt is a pregnant and convincing Proof: For they never lay their Eggs, except in such a place, as they perceive before-hand, will not be cover'd by the Inundation. Men indeed, who enjoy a perfect state of Health, are less sensible of such small Mutations of the Air, as nevertheless brute Animals seem to have some Foreknowledge of, and of which even inanimate Bodies give foreboding Signs. The Geese, we know, often gaggle, and the Frogs croak in uncertain Weather, but not in settled Fair, which Cinders sticking to the Tongs forebode: The very Snuff of Lamps gives Bodings of Rain, and that too so visible, that even our drudging Maids perceive them: Virg. Georg. i. v. 390.

Nec nocturna quidem carpentes pēnsa puellæ
Nescivere hyemem, testa cum ardente viderent
Scintillare oleum, & putres concrefcere fungos.

But of this see Aratus, lib: 3. var. lect. cap: 21. and chiefly Theophrastus, in his Book de Indiciis Ventorum, Serenitatis, & Pluviæ, who first of any, says P. Victorius, fully adorn'd this Subject. And no doubt the dry'd Dirt, and Slime of which we were speaking, would have imbib'd some Portion of the Humidity, the Day before the Nile overflow'd, had it not been kept so close: but being once releas'd from that Custody, it forthwith rushes into the Embraces of the desir'd Moisture, following the natural Propensity of dry Bodies to wet.

735 Next of th' *AVERNI* sing, and whence the NAME,
And whence the RAGE, and hurtful NATURE came.
So call'd, because the BIRDS, that cut the Sky,
If o'er those Places they but chance to fly,
By NOXIOUS STEAMS oppress'd, fall down, and dy: }
DEATH

NOTES.

735. Next, &c.] Lucretius does not acknowledge a beneficent, but flatly denies an angry, God: and as he takes from the Gods above the Phænomenons of the Heavens, and of the Air, so does he too from the Powers below some noxious Things that pass for Prodigies upon Earth. For, says he, there are certain places, which we call *Averni*, and that are fatal to Birds that fly over them, and to other Animals, that chance to pass by them: One of these *Averni* is at *Cumæ*, another near *Minerva's* Temple in *Athens*, and a third in *Syria*: These Places Men believe to be the Entrances of the Roads that lead to Hell, to the Palace of *Pluto*, and that the Manes, or Souls of the Dead, pass that way to the subterranean Abodes. Now the Poet, that he may more fully and distinctly explain the Force and

Nature of these Places, teaches first, that the Earth contains many Seeds, as well noxious as wholesome, both to Men and other Animals: and then he brings a Heap of Examples, to prove that the Exhalations, that flow from many Things, are hurtful and deadly to many Things: Having premis'd this, he comes to the Question, and says, that a noxious Vapour breathes from the *Averni*; and either that poisonous Steams strike with suddain Death the Birds that fly over them: or that the rising Exhalation attenuates and drives away the Air to that degree, that the Birds can not support themselves, nor sustain their Flight in so void and empty a Space, and that, falling into that Void, they forthwith expire. This is contain'd in 96. v.

737. So call'd, &c.] In these
7. v.

740 DEATH meets them in the Air, and strikes them dead ;
They fall with hanging Wing, and bended Head ;

And

NOTES.

7. v. the Poet premises the Etymology of the Word *Averni*, or rather the Reason why these Places were so call'd. Virgil too gives the same Reason of the Name, and has imitated this Passage of Lucretius, in his sixth *Æneid*, v. 237. in these Verses.

*Spelunca alta fuit, vastoque immanis hiatu,
Scurpea, tuta lacu nigro, nemonumque tenebris ;
Quam super haud ullæ poterant impunè volantes
Tendere iter pennis ; talis sese halitus atris
Faucibus effundens supera ad convexa ferebat ;
Unde locum Graii dixerunt nomine Avernum.*

Which Dryden thus interprets :

Deep was the Cave, and downward as it went
From the wide Mouth, a rocky rough Descent :
And here th' Access a gloomy Grove defends ;
And here th' unnavigable Lake extends ;
O'er whose unhappy Waters, void of Light,
No Bird presumes to steer his airy Flight :
Such deadly Stenches from the Depth arise,
And steaming Sulphur, that infects the Skies.
From hence the Grecian Bards their Legends make,
And give the Name *Avernus* to the Lake.

For the Greeks call'd it *Ἀορνῶς*, from the privative Particle *ἀ*, and *ορνῶς*, a Bird, because the noxious Vapours, that exhal'd from the *Averni*, were so poysonous, that

they struck dead the Birds that flew over them. Thus Homer *Odyss.* 12.

Τῇ μὲν τ' ἐδὲ πόλιν αὖ παρέρχετο,
ἐδὲ πέλειαι.

i. e.

Where neither Dove, nor other Bird can fly.

And so much for the Reason of the Name *Avernus*, which extends to all Places, whose deadly Exhalations kill the Birds that fly over them.

741. They fall, &c.] Lucretius:

Remigii oblitæ pennarum vela remittunt.

For the Wings do the same Office to Birds, as Oars and Sails to Ships, which are said to fly with Sails, as with Wings: Virg. *Æn.* 3. v. 520.

—— *Velorum pandimus alas.*

And, on the contrary, Birds are said to swim. Virg. *Æn.* 6. v. 15. speaking of *Dædalus*,

*Præpetibus pennis ausus se credere cœlo,
Insuetum per iter gelidos enavit ad Arctos.*

And in the same Book, v. 19. we find the very Expression of Lucretius, *Remigium alarum*: And *Æn.* 1. v. 304. speaking of *Mercury*.

—— *Volat ille per aëra magnum Remigio alarum.*——

But not only Virgil after Lucretius ; for all the Antient Poets us'd

And strike the poisonous LAKE, or deadly FIELD:

Such VAPOURS boiling SPRINGS near CUMÆ yield.

In ATHENS, where MINERVA'S Temple stands,

There

NOTES.

us'd this Metaphor. Ovid, in his Epistles, applies it to Men's Arms:

——Remis ego corporis utar.

I'll use the Bodies Oars.

See more Book V. v. 315.

With hanging Wings, and bended Head:] Lucret. Molli cervice profusæ: A fine Image of a fainting, dying Bird; and not unhappily render'd by our Translator.

743. Such Vapours, &c.] This Verse runs thus in the Original.

Qualis apud Cumas locus est,
montemque Vesevum,
Oppleti calidis ubi fumant fontibus auctus.

In which two Verses the Poet teaches, that there is such a Place at Cumæ, and on the Mountain Vesuvius. Cumæ was a City of Campania, not far from Puteoli, now call'd Puzzuolo, in the Kingdom of Naples: but of Cumæ there are no Footsteps remaining. The Lake Avernus, is, to this Day call'd Lago d' Averno, and lies between Baia and Puzzuolo. Near this Lake there are now to be seen the Remains of two Caves; one on the South side of it, still call'd Grotta di Sibylla, where dwelt the Cumæan Sibyl, and seems to be the Mouth of that Passage under Ground, which led from Avernus to Cumæ, but is now stop't up by the falling in of the Earth: the other is that, which to this Day leads from Puzzuolo to Naples, being dug thro' the Mountain Paufilypum, now known by the Names of Antignana, and Conocchia.

Now the true Nature of the Lake Avernus was this: The Waters of it were very clear and deep: whence Herodotus, lib. 4. calls them cerulean, that is to say black; for all deep Waters seem of that Colour. This Lake was surrounded with steep rocky Hills, cover'd with thick Woods, that render'd it inaccessible, except in one Place only: This we learn from Strabo, lib. 5. And Pliny, lib. 31. cap. 2. acquaints us, that all that Tract of Land abounded with innumerable Springs of hot Water, mixt with Sulphur, Alom, Salt, Nitre, and Brimstone: But that the Vapours, which steam from this Lake, are fatal to Birds, is by Strabo, in the Place abovesited, deem'd a Fable, because of the Clearness and Transparency of the Water: of which Aristotle too takes Notice. Vesevus, or Vesuvius, is a Mountain of Campania, not far from Naples, and that vomits out Flame and Smoke, like Ætna in Sicily. Sir R. Blackmore describes it thus:

As high Vesuvius, when the
Ocean laves
His fiery Roots with subterranean
Waves,
Disturb'd within, does in Con-
vulsions roar,
And casts on high his undigested
Oar;
Discharges massy Surfeit on the
Plains,
And empties all his rich metal-
lick Veins,
His ruddy Entrails: Cinders,
pitchy Smoke,
And intermingled Flames the
Sun-beams choak.

744. In Athens, &c.] In these

X x x x

7. v.

745 There never CROW, nor boading RAVEN flies,
Not, tho' the fat and oily Sacrifice
Allure his Smell, and call his willing Eyes.

Not

NOTES.

7. 7. the Poet says, there is another such a Place at Athens, at the very top of the Tower, near the Temple of Pallas.

Est & Athenæis in mœnibus, arcis in ipso
Vertice, Palladis ad templum Tritonidis almæ.

Of Athens, see the Note on the first Verse of this Book.

Minerva] She was the same with Pallas, who was call'd Minerva, either from minari, to threaten, because she is painted in Armour: or from memini, I remember, because she is said to be the Goddess of Memory, or rather from the old Word minervo, I admonish, because she gives good Advice to Men, as being the Goddess of Wisdom, and of Arts. She was call'd Pallas from the Greek Word *πάλλω*, I shake, because she is feign'd to be born out of the Brain of Jupiter, and arm'd, and brandishing a Spear. She is said to be the first who invented Building, and even to have built herself the Tower at Athens, which was call'd *Ἀκρόπολις*, because it stood in the highest Place of the City. Hence Virg. Ecl. 2. v. 61.

—Pallas, quas condidit arces,
Ipsa colat.—

She refus'd to marry with Vulcan, and kept her Virginity: whence the same Virgil, *Æn.* 2. v. 31. calls her innupta Minerva. She was likewise call'd Tritonis, or Tritonia, either from the Greek *τρίτη*, which signifies a Head, because, as we said before, she was produc'd out of the Head of Jupiter: or because, in the time of King Ogygius, she was first seen

in the Habit of a Virgin, on the Banks of the River Triton. This is confirm'd by Pomponius Mela, lib. 1. cap. 7. where, speaking of Triton, the Name of a Lake and River in Africa, not far from the Syrtis Minor, he says, that Minerva was call'd Tritonis, because, as the Inhabitants believe, she was born there; and that they celebrate her Birth-day with ludicrous Sports, of Virgins contending with one another. Unde, says he, *Minervæ cognomen inditum est, ut incolæ arbitrantur, ibi genitæ: faciuntque ei fabulæ aliquam fidem, quod quem natalem ejus putant, ludicris virginum inter se decertantium celebrant.* Thus too Lucan, lib. 9. v. 347.

Torpentem Tritonos adit illæsa
paludem:
Hanc & Pallas amat: patrio quæ
vertice nata,
Terrarum primam Libyen, (nam
proxima cœlo est,
Ut probat ipse calor) retigit:
stagnique quietâ
Vultus vidit aquâ, posuitque in
margine plantas;
Et se dilectâ Tritonida dixit ab
undâ.

Or perhaps the Latine Authours allude to the Greek Epithet of Pallas, who *Iliad.* 2. v. 157. and elsewhere, is said to be *ἀτρεψήνη*, untam'd, void of Fear, from privative *ἀ* and *τρεψν*, to tremble.

746. Not tho', &c.] The Raven, says Lucretius, has such an Aversion to that Place, that although Sacrifices are offer'd there, he will not even then come near it, tho' the Smell of the tempting Flesh seem to invite his Hunger to taste.

748. Not

Not that he fears MINERVA'S vain Pretence,
Or banish'd from her Train for an Offence;
750 But 'tis the noxious VAPOUR drives him thence.

A Place, as Story tells, in SYRIA lies,
Which if a HORSE goes o'er, he groans and dies,
As if by suddain Stroke, and vi'lent Blow,
He fell a Sacrifice to GODS below:

755 Yet these EFFECTS agree with NATURE'S Laws,
And strict Observers may discern the Cause:
Left you should fancy these the GATES of HELL,

That

NOTES.

748. Not that he fears, &c.] Lucretius alludes to the known Fable of the Nymph Coronis, who, flying from Neptune, who would have offer'd Violence to her, was chang'd by Minerva into a Raven, and permitted nevertheless to attend her Train: But when that Goddess had given Erichonius, shut up in a Basket, in Charge to Pandrosos, Herse and Aglauros, with Orders not to open it, the Raven saw them transgress the Commands of Minerva, and acquainted her with it: For which Garrulity, she banished her from her Protection and Train. The Fable is related at large in Ovid. Metam. 2. by Coronis herself, who says,

Acta Deæ refero: pro quo mihi
gratia talis
Redditur, ut dicar tutelâ pulsa
Minervæ.

— Mea poena volucres
Admonuisse potest, ne voce pericula
quærant.

751. A Place, &c.] In these 4. v. the Poet says, there is a Place in Syria, that strikes dead in a Moment any four-footed Beast: But Lambinus believes the Poet speaks of the Plutonium in Hierapolis, not far from Laodicea: which is a Cave so call'd from Pluto, because it was believ'd to be the breathing Hole

of that infernal God, Strabo, lib. 13. describes it to be a Hole in a hollow place, under the Brow of a Mountain, wide enough to receive the Body of a Man; but immensely deep: That it is present Death to any Animal that goes into it: Bulls, says he, led to the Place, drop dead immediately: he adds the like of Sparrows, that were put in at the Mouth of it. To which we add, what is reported of the Cave, call'd Panium, at the Foot of Mount Libanus: That it exhales a Vapour, that causes likewise suddain Death.

Syria] Is a Province of Asia, and the largest of that Quarter of the Earth. It is generally divided into four: Syria, Assyria, Coelosyria, and Leucosyria.

755. Yet these, &c.] In these 8. v. he says, that all these Things proceed from natural Causes: Therefore the Poets falsely taught, that these Avernian are the Gates of the Roads that lead to Hell: which Fables they invented only to strike a Terrour into easy Believers: and he promises, that he will explain all these Matters, and shew the natural Causes of these seeming wonderful Effects.

757. The Gates of Hell,] The Latine Poets, when they treat of the Affairs of their own Country, make that Avernus, of which v. 743. to be the Gate of Hell:

That there the smutty Gods, and *MANES* dwell;
 And thro' those Places draw the wand'ring SOULS,
 760 AS DEER suck SERPENTS from their lurking Holes :
 But that's absurd, irrational, and vain :
 Come, understand the Cause, for I'll explain.
 First, SEEDS do lie, as I have prov'd before,
 In EARTH, of ev'ry Shape a mighty Store :
 765 Some, vital Parts to MEN, prolong their Breath,
 Some apt to breed DISEASE, and hasten DEATH :
 To other ANIMALS some Parts are good :
 Some hurt, some kill, and some give wholesome Food :
 And all these different Effects arise
 770 From diff'rent Motion, Figure, Shape, and Size.
 A thousand hurtful PARTS thro' EARS descend,
 A thousand pass the NOSTRILS, and offend :

NOTES.

Hell : Virg. *Æneid.* 6. v. 126.

——Facilis descensus Averni.

And *Æneas*, with the Sybil, descended that way : But when the same Poets describe the Affairs of the Greeks, they place the Gates that lead to the Infernal Mansions, in the Caves of the Mountain *Tænarus*, which is a Promontory of *Laconia*, in the most Southern Part of *Peloponnesus*, between the *Laconick* and *Messenick* Gulphs, and now call'd *Capo Maina* : *Orpheus* is said to have descended this way : *Georg.* 4. v. 467 : and so too are *Hercules* and *Theseus* in the *Herc. Fur.* of *Seneca*.

758. The smutty Gods] The infernal Gods : *Lucretius* names *Orcus*, whom *Silius Italicus* takes for *Cerberus*, and others for *Charon* : but *Cicero de Naturâ Deorum*, lib. 3. cap. 43. for *Pluto*, the Brother of *Jupiter*, and of *Neptune* ; and to whom by *Lot* fell the Empire of Hell : He ravish'd *Proserpina*, the Daughter of *Ceres* : He was call'd *Dis*, as well as *Pluton*, both which Names he has from *Riches* :

which are said to be dug out of the Bowels of the Earth : for he was call'd *Dis* by the Latines, from *Divitiæ*, and *Pluton* by the Greeks, from *πλετο*, which signifies the same Thing.

Manes] Of the *Manes*, and the several Acceptations of the Word, we have spoken at large in our Note on v. 52. of B. III.

760. As Deer, &c.] *Pliny* says, that the Breath of Elephants draws Serpents out of their Holes ; and that the Breath of Deer burns them. *Elephantorum anima Serpentes extrahit, Cervorum item urit.* *Nat. Hist.* lib. 11. cap. 53. But if this be false, the Raillery of *Lucretius* is not the less sharp and pleasant.

763. First Seeds, &c. In the following 49. v. the Poet, before he demonstrates that all these Things happen by natural Causes, puts us in mind of what he taught in the first and second Books : viz. that in the Earth are contain'd Atoms of many various Shapes : and that by reason of the dissimilitude of their Nature, and the different Texture of their Figures, some of them are beneficial, others pernicious

A thousand hurt the TOUCH, a num'rous Store
 Disturb the EYE, the TASTE a thousand more :
 775 Besides, on MAN, a thousand ATOMS wait,
 And HURTFUL all, and carry hasty FATE :

Thus often, under TREES supinely laid,
 While MEN enjoy the Pleasure of the SHADE,
 Whilst those their loving Branches seem to spread,
 780 To skreen the Sun, they noxious Atoms shed,
 From which quick PAINS arise, and sieze the HEAD.

Near *HELICON*, and round the LEARNED HILL,
 Grow TREES, whose BLOSSOMS with their ODOUR kill;
 And all these hurtful Things from EARTH arise,
 785 Because the PARENT EARTH's vast Wombs comprize
 Those diff'rent Stores and Kinds of poisonous Seed,
 Which, fitly join'd, these hurtful Natures breed :

The SNUFF of CANDLES, this is often known,
 Offends the Nose with Stench, and makes us swoon.

Besides

NOTES.

nicious to Men : but that some of them are hurtful to the Eyes, others to the Ears, others to the Tongue, &c. all which he confirms by several Examples.

777. Thus often, &c.] In these 5. v. he brings Example Ist Of Things that are hurtful to Man : but says nothing of the Name of the Tree, whose Shade is offensive, Pliny, lib. 17. cap. 12. says that the Shade of the Walnut-Tree offends the Head, and that no Plants will thrive under it. Fayus, in his Note on this Place, cites these two Verses of Virgil, Eclog. 10. v. 75.

*Surgamus ; solet esse gravis cantantibus umbra,
 Juniperi gravis umbra ; nocent & frugibus umbræ.*

But the shade of the Juniper is very grateful, being an odorous Tree, and that suffers nothing venomous to grow near it : but the meaning of Virgil was, that to continue long in the shade, might be dangerous, because of the cold : and some Editions

read not *cantantibus*, but *cunctantibus*. And Lucretius means the same Thing, and not the shade of any particular Tree. The shade of the Box-tree, however, is said to cause the Head-ach.

782. Near Helicon, &c.] In these 6. v. he proposes his IId Example : What Tree he means is hard to say : some suppose it to be the Box ; of which Pliny, lib. 16. cap. 10. but besides that the *floris odore necare*, which are the Words of Lucretius, agrees but ill with that Tree, why should he send us to Helicon for a Tree, that is very plentiful in Italy. Helicon is a Hill in Boeotia, not far from Parnassus, which our Translatour here means by the learned Hill : and they have both of them equal Title to that Appellation, being alike sacred to Apollo and the Muses. Of Helicon, see more in the Note on v. 557. B. IV.

788. The Snuff, &c.] IIIId Example. To which we may add what Pliny says, lib. 7. cap. 7. that it often causes Abortion in Women.

Our

790 Besides a thousand other Things, that sieze
The SOUL within, oft make their way with Ease,
And shake the vital Pow'rs with strong DISEASE.

So when the BELLY's full, go sit, and stay,
And wanton in HOT BATHS, strait flies away
795 Thy Life, thy Strength, and all thy Pow'rs decay :

From

NOTES.

Our Translatour has omitted the IVth Example, which Lucretius brings of an Ointment made of the Testicles of the Beaver, which by its nauseous Smell, says Pliny, makes Women with Child miscarry : But Lucretius says only, that it stupifies Women, and throws them asleep : and that if they smell the Odour of it, at the time when they have their monthly Disease, it makes them let fall whatever they hold in their Hands. This in the Original runs thus :

*Castoreoque gravi mulier sopita
recumbit,
Et manibus nitidum teneris opus
effluit ei,
Tempore eo si odorata est,
quo menstrua solvit.*

793. So when, &c.] In these 3. v. he brings Example Vth Of Bathing : For, says he, it is hurtful to continue long in a hot Bath, immediately after eating : The Custom among the Romans was to bathe before Supper : but the riotous us'd to bathe themselves also after Supper : and this they did to procure Digestion : See Pliny, lib. 29. However the Physician in Persius advises his Patient not to bathe after eating, that being a Custom very pernicious to Health : but the gluttonous Youth refusing to take his Advice, paid dear for his Obstinacy, if the Effects of his Bathing were truly such as they are describ'd by that Poet, Sat. 3. v. 50. in these Verses :

*Turgidus hic epulis, atque albo
ventre lavatur,
Guttur sulphureas lente exha-
lante mephites :
Sed tremor inter vina subit, cali-
dumque triental
Excudit è manibus ; dentes cre-
puère resecti ;
Uncta cadunt laxis tunc pulmen-
taria labris, &c.*

Juvenal too, Satyr. i. v. 142. mentions the Danger of this Practice of bathing with a full Stomach, and says,

*Pœna tamen præsens, cum tu de-
ponis amictus
Turgidus, & crudum pavonem
in balnea portas.*

Moreover ; we may farther observe, that at their Baths there were three Cells ; the cold, the warm, and the hot : all which were Baths of Water : but in some of their bathing Houses there was a fourth Cell, which they call'd Laconicum, or cella assa, that is to say, sicca sine lotione : ἀψιδρωτικήον and where these were, the Places were rather call'd Balnearia, than Balnea : according to the Property, of which, as Marcilius notes, Tully, lib. 3. ad Q. Frat. Epist. i. speaks, when he calls them, assa in Balneariis. Horace likewise, and others often mention the Faintness, that siezes such as bathe themselves after a full Meal.

796. From

From CHARCOAL deadly Smells the Brain engage,
If Draughts of Water not prevent their Rage.

To those whom FEAVERS burn, the piercing smell
Of vig'rous WINE is grievous, Death, and Hell.

800 Besides ; observe what PARTS the EARTH contains,
And how much pois'nous SULPHUR fills her VEINS.

Lastly, whilst MEN pursue the hidden Store,
And dig in MINES of gold, or silver Ore ;
What hurtful DAMPS, what noxious VAPOURS rise !

805 The wretched MINER o'er the METAL dies.
What noxious Parts from golden MINES exhale !
How soon they sieze, and make the MINERS pale !
With what quick Force they kill the wretched Slaves !
How soon they bury them in pretious Graves !

810 Therefore these NOXIOUS PARTS must often rear,
And scatter POISON thro' the upper Air.

Thus HURTFUL PARTS from the AVERNI rise,
And with strong POISONS fill the lower Skies :

And these, as BIRDS cut thro' the liquid Way,
815 Sieze them ; and then some Parts of Life decay :

Thus they amaz'd on the AVERNI fall,
And there the POISONS work, and ruin all :

For first they make them giddy ; then their Wing
Grows weak ; they fall into the Poison's Spring ;

820 There die ; there leave their SOULS in deep Despair,
Because the POISON's fierce, and stronger there :

Or

NOTES.

796. From Charcoal, &c.] Example VIth in 2. v. and Example VIIth in 2. v. likewise, need no Explication.

800. Besides, &c.] In these 2. v. which contain Example VIIth the Poet observes, that Sulphur and all bituminous Matter, whose Steams and Vapours are very offensive and hurtful to Man, are generated in the very Bowels of the Earth.

802. Lastly, &c.] In these 10. v. the Poet brings the IXth and last Example : and says that the Mines, in which Metals are dug, exhale such noxious Damps and Vapours, as often kill the Wretches, who are condemn'd to that

slavish Drudgery. Thus from these Veins of the Earth, as well as from the other Things above mention'd, breathe forth poisonous and deadly Exhalations.

806. What noxious, &c.] It is observed, That all Metals have not the same Smell. Gold, heated in the Crucible, is sweet : Silver not so pleasing : melted Brass stinks : and the Steam of melted Iron is intolerable.

812. Thus hurtful, &c.] In these 10. v. he concludes by way of Similitude from the Instances above given, That in these Places, which are call'd Avernî, the Earth exhales virulent and deadly Vapours, and sends out noxious

Or else the constant rising Streams displace
 The neighb'ring Air, and leave an empty Space :
 Where, when the Birds are come with nimble Force,
 825 And still endeavour to pursue their Course,
 Deceiv'd they fall, they clap their Wings in vain ;
 For no resisting airy PARTS sustain,
 Their Weight does force them on the poisonous PLAIN.
 And while they helpless in the VACUUM lie,
 830 Breathe out their Soul thro' ev'ry Pore, and die.

In SUMMER, SPRINGS are COLD ; for EARTH contains
 Some SEEDS of HEAT within her hollow Veins :
 But when the HEAT's Increase, and vig'rous Ray
 Forces a Passage thro', they fly away :
 835 Thus as the SUMMER comes, and RAYS begin
 To cleave the EARTH, the STREAMS grow cold within :
 But

NOTES.

ous Atoms, which kill the Birds as they are flying over those Places.

822. Or else, &c.] In these 9. v. he adds another, but ridiculous, Cause, why the Birds drop down dead into the Averni : As if the Vapours, that exhale from thence, change the Air into Vacuum, or rather totally expell, and drive it away, so that the Birds can not bear themselves up, nor support their flight in a meer Void.

831. In Summer, &c.] There are many Things so excellently well accommodated to the use of Man, that they are alone sufficient to evince a bountiful and gracious Providence : Thus in Summer Well-water is cold, as if it were order'd so on purpose to moderate the Heat of that Season : and on the contrary, it is warm in Winter, to refresh and revive us. But Lucretius, in these 10. v. endeavours to elude this Difficulty : and gives this natural reason of that Change : In Summer, says he, the Surface of the Earth is rarefy'd by the Heat of the Sun ; and the Seeds of Fire, that are contain'd in the

Earth, break out into the Air : but in Winter the same Seeds are constrain'd, and, being bound fast in the Earth by the Cold of that Season, are compress'd and squeez'd into Wells ; and thence proceeds the Warmth of the Water.

Aristotle says this is caus'd by an Antiperistasis, i. e. Circumobfistentia, a Reciprocation, and surrounding on all sides, by means of which, where Heat is, thence Cold is expell'd : where Cold, thence Heat : And Cicero, after the Opinion of the Stoicks, explains it thus : Omnes igitur partes Mundi, tangam autem maximas, calore fultæ sustinentur : quod primum in terræ natura perspicui potest : nam & lapidum conflictu, atque tritu elici ignem videmus : & recenti fossione terram fumare calentem : atque etiam ex puteis jugibus aquam calidam trahi, & id maxime hiernis fieri temporibus, quod magna vis, terræ cavernis, continetur caloris ; eaque hieme fit densior : ob eamque causam calorem insitum in terris contineat arctius. Lib. 2. de Nat. Deorum. Therefore, says he, all the several
 Parts

But COLD contracts the PORES to lesser Space,
 And binds the SEEDS of HEAT with strict Embrace:
 And these, squeez'd from the PORES, with nimble Wings
 840 Pass into lower WELLS, and warm the SPRINGS.

Near *AMMON'S* Shrine, as FAME has loudly told,
 A SPRING runs HOT by NIGHT, by DAY 'tis COLD:

This

NOTES.

Parts of the World are supported by Heat: this is evident from the Nature of the Earth itself: for, by striking and rubbing of Stones, we urge out Fire, and new-dug Ground exhales a warm Smoke: besides, we draw warm Water out of our Wells, and that too, chiefly in Winter: the reason is, because much Heat is contain'd in the Caverns of the Earth: and the Earth becomes more dense, and contracted in Winter; and for that reason keeps in the more closely its innate Heat and Fires. There are some however, who controvert the Truth of this Matter, and assert it to be only a vulgar Errour, and not a solid and certain Observation. But most are of a contrary Opinion, and assign two Causes of this Effect: One of them they call privative; the other, positive: The first of them is, by reason of the departure of the Heat, or hot Bodies, [for we are permitted to speak thus in the School of Epicurus, and of Aristotle too, who will not allow, that Accidents pass from Subject to Subject] out of the Earth. That innate Heat of the Earth is occasion'd by Subterranean Fires; and evaporates in Summer, attracted by the ambient Heat: for, according to the Observation of Hippocrates, like Things resort to like, and naturally delight to be together.

841. Near, &c.] But it may be objected, that tho' the divine Power be not in all Springs and Wells, it is certainly visible in the Fountain, that is at the Tem-

ple of Jupiter Ammon, of which Curtius, lib. 4. Sect. 7. says: *Ammonis nemus in medio habet fontem, aquam solis vocant. Sub ortum solis tepida manat; medio die, cum vehementissimus est calor, frigida eadem fluit; inclinato in vespertum, calefcit; media nocte fervida exæstuat: quodque propius nox vergit ad lucem, multum ex nocturno calore decrefcit, donec sub ipsum diei ortum assueto tempore languescat:* In the midst of the Grove of Ammon, there is a Spring of Water, call'd the Water of the Sun; at Sun-rising it flows out luke-warm, at Noon, when the Heat is most violent, it comes out quite cold: In the Evening it grows warm again; at Midnight it gushes out very hot; and as the Night wears away, and the Morning approaches, the Heat it had in the Night decreases, till about the usual time, at break of Day, it becomes again barely warm. This is confirm'd by Pliny, lib. 2. cap. 103. by P. Mela, lib. 1. cap. 8. in these Words: *Ammonis Oraculum fidei inclytæ; & fons, quem solis appellant: — Fons media nocte fervet: mox & paulatim tepescens, fit luce frigidus: tum, ut sol surgit, ita frigidior: subinde per meridiem maximè riget: sunt deinde tepores iterum; & prima nocte calidus: atque, ut illa procedit, ita calidior: rursus, ut est media, perfervet.* Nor may we omit the Testimony given by Ovid. *Metam. lib. 15. v. 308.* in these Words:

Y y y y

— Quid?

This Men admire, and think, when NIGHT has spread
 Her blackest Curtains o'er our sleepy Head,
 845 The SUN below does cast his vig'rous Beams,
 And pierces thro' the EARTH, and warms the STREAMS.

Absurd

NOTES.

Quid? non & lymphæ figuræ

Datque, capitque novas? medio
 tua, corniger Ammon,
 Unda die gelida est; ortuque,
 obituque calefcit.

See likewise Pontanus in Meteor. And Ammianus, lib. 3. But this too, says Lucretius, is alledg'd in vain, and signifies nothing: For tho' they are mistaken, that impute the cause of it to the Sun, who, as they pretend, when he is beneath the Earth, warms those Waters thro' the Body of the whole Earth, thick as it is; yet the reason may be, because the Earth, being contracted by the Cold of the Night, squeezes down and transmits the Seeds of Fire into the Water, which by that means grows warm; but the same Earth, being loosen'd and set at liberty by the Heat of the Day, receives, and, as it were, swallows them in again: and thus the Waters lose much of the Heat they had in the Night, Besides, that very Water, which becomes warm, because the cold and chilling Night depresses and keeps down the Seeds of Fire, grows cold again in the Day; because the Beams of the Sun, darting into the Water, and rarefying it, open a free Passage for those Seeds to get out into the Air: For the Heat of the Sun dissolves Ice in such a manner; as to release and set at liberty the slender Stalks of Corn, and other Things of like Nature, which by the Cold of the Night, were detain'd and bound in icy Fetters. This is contain'd in 28. v. Thus Lucretius assigns two Causes; but whe-

ther either of them be true or not it is not worth while to inquire, since the Thing itself is a meer Fiction: for none of our Historians or Geographers, who describe Fountains, pretend that they ever saw this. Yet we have pretty good Authority for a Fountain, that was discover'd not long ago in the Woods, near Clermont in Auvergne: whose Waters freeze hard in the Months of July and August; but never in the Winter. Prope urbem Claramontem fons, nuper inventus, dicitur, La Cave de la glace: Qui fons certe mirabilis: nam ejus aqua, Julio, & Augusto mensibus, gelu vehementer astringitur, minime vero hyeme, says a certain Eye-witness of it.

Ammon] Jupiter Ammon had an Oracle that was in great Renown with the Egyptians and Africans, and a Temple in Lybia, to the East of the Countrey of Cyrenaica, to the West of Egypt, and to the North of the Garamantes and Nasamones, in a moist and Palm-bearing Soil, tho' all the Countrey round be most dry and desert. The Origine of this is variously reported: the most common Opinion is, that Liber, or Bacchus, after he had conquer'd all Asia, and was leading his Army thro' the Deserts of Lybia, was in danger of perishing, he and all his Men, with Thirst: In this Distress a Ram appear'd to him, and with his Horn shew'd him a Fountain of Water: now he suppos'd this Ram to be his Father Jupiter, and therefore erected a Temple to him, and gave him a Ram's Head and Horns. He call'd him Ammon from the Sand, which in

Absurd and vain! For since the furious RAY,
 When, roll'd above, it makes our warmest DAY,
 And beats the open Surface of the Sea,
 850 Can raise but little Warmth; when roul'd below,
 How pierce the EARTH, and heat in passing thro'?
 Since SENSE assures, that when the RAYS do beat,
 Our HOUSES yield us a secure Retreat;
 We lie within, and scorn the SUMMER'S Heat.
 855 Then what's the Cause? 'Tis this; A SPUNGY GROUND,
 And fill'd with FIRY SEEDS, lies all around:
 This when COLD NIGHTS contract, the Seeds of Fire,
 Squeez'd out, flie off, and to the SPRING retire,
 And make it HOT: but when the vig'rous Ray
 860 Peeps forth, and opens them an easy Way,
 They leave the cold Embrace, and soon retreat
 To EARTH again, and take their former Seat:
 And thus, by DAY, it loses all its HEAT.

Besides,

NOTES.

in Greek is ἄμμος, or ψάμμος. But Plutarch, lib. de Iside, seems to deny this Name to be of Greek Extraction, and says it is deriv'd from the Egyptian Language: Whence some believe that Ham, or Cham, the Son of Noah, and who was the first that cultivated the Land of Egypt, was worshipp'd under that Name: others will have Ammon to be the Sun; Macrob. Saturnal. lib. i. cap. 21. Ideo & Hammonem, quem Deum solem occidentem Libyes existimant, arietinis cornibus fingunt, quibus maximè id animal valet, sicut sol radiis; nam & apud Græcos ἄμμος τῆς καραχέως, appellatur. And to strengthen this Opinion, the Hebrew Word Hamma signifies the Sun and Heat: But whoever it was that was there worship'd under the Name of Ammon, Alexander the Great, when he was in Egypt, went to this Temple, and made the Priests acknowledge him for the Son of their God.

Water of the Fountain of Ammon grew cold by Day, and hot in the Night, for the sole reason of the Departure, or Accession of the Sun: And this he proves to be impossible by an Argument, à majori, as they call it. For, if the Sun can not warm the open and naked Body of the Water, when he shines upon it from above, much less can he impart his Heat to the Waters thro' the thick and close-compacted Body of the Earth: For the Heat of the Sun must of necessity pass through the whole Body of the Earth, to warm by Night the Waters of that Fountain: And yet we see that even our Houses shelter and protect us from the fiercest of his Beams,

847. Absurd, &c.] In these 8. v. the Poet confutes their Opinion, who believ'd, that the

855. Then what's, &c.] In these 9. v. he ascribes the first Cause of the nocturnal Heat, and diurnal Cold of the Waters of the Fountain of Ammon to the Seeds of Fire or Heat, that are in the Earth about that Fountain, and beneath the Water: He explains this in the manner that follows: The Earth, says he, being com-

Y y y y 2

press'd

Besides, the WATER grows more rare by Day ;
 865 Its Parts, divided by the piercing Ray,
 So lose their Fire: as when the BEAMS arise,
 And warm the frozen Streams with soft'ning Kifs,
 They melt in the Embrace, and lose their ICE.

And some COLD SPRINGS light FLAX, held o'er the
 Streams,
 870 The FLAX takes Fire, and scatters feeble BEAMS:

NOTES.

press'd by the Cold of the Night, squeezes out, and transmits into the Water, those Seeds of Heat; by means of which the Water grows hot: but, being loosen'd by the Heat of the Day, she receives again into her Bowels those very same Seeds, and thus the Water becomes cold.

864. Besides, &c.] In these 5. v. he refers the second Cause to the heat of the Sun: as if it were possible, that the Water, which in the Night is made hot by the Seeds of Fire, could grow cold again in the Day, by reason of the Beams of the Sun penetrating into the same Water, and rarefying it in such a manner, as to open a free Passage into the Air for those Seeds of Fire.

867. With soft'ning Kifs,] Here our Translatour had his Eye upon Cowley: who says;

So the Sun's am'rous Play
 Kisses the Ice away.

869. And some, &c.] In these 25. v. he mentions a Spring, that will both extinguish a lighted Torch, if it be plung'd into the Water, and light it again, if it be mov'd gently to touch the Surface of the Water: The reason of which, says he, is, because there are in that Water, or in the Earth under it, many Seeds of Fire, which, breaking out of the Water, stick to the Tow, or Torch newly extinguish'd, and set Fire to them again: Nor is it more incredible, that Seeds of

Fire should force their way out of Water, than that a Spring of fresh Water should rise up in the middle of the Sea: And we every Day see Candles, Torches, &c. that are but just put out, kindle again, even before they come to touch the Fire towards which they are mov'd.

Lucretius mentions neither the Name nor Place of this miraculous Spring: but having shewn that there is nothing wonderful or divine in the Spring of Jupiter Ammon, he here attacks the Fountain of Jupiter of Dodona; for he never gives any Quarter to that God. Now not far from Dodona, a City of Epirus, there was a Grove of Oaks sacred to Jupiter, where the Oaks are said to have pronounc'd Oracles; tho' others say the Answers were given by two Doves sitting on these Oaks, and one of which flew away to the Temple of Apollo at Delphi, the other to that of Jupiter Ammon, where they continu'd their old Trade of Fortune-telling. Pliny, lib. 2. cap. 103. says, In Dodone Jovis autem Fons, cum sit gelidus, & immersas faces extinguat, si extinctæ admoveantur, accendit. And Gassendus, on the tenth Book of Laërtius, page 157. says, that not far from Grenoble, there is an ardent Fountain, that will take Fire, if it be touch'd with a lighted Torch, and continue burning for more than a few Days. Pliny, lib. 31. cap. 2. says, that there is a Fountain in India, call'd

A TORCH is kindled too: the FLAMES appear,
 And nod at ev'ry little Breath of Air;
 Because the Water SEEDS of HEAT contains,
 And many rise from EARTH's capacious Veins,
 875 And cut the BODY of the STREAMS, and flow,
 Too weak to warm the WAVES in passing thro'.

Besides;

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call'd Lycos, whose Water will light a Candle; and he reports the same Thing of another at Echbatan, which Solinus confirms to be true. And since we are on this Subject of wonderful Fountains, we will mention some of the many, recorded by the Antients, and whose Effects, if true, are indeed miraculous. There is a Fountain in the Island Cea, that perfectly stupifies those that drink of its Waters: Plin. lib. 31. cap. 2. Another, near Clitor in Arcadia, whose Water causes a loathing of Wine, Plin. Loc. citat. And Ovid. Metam. 15. v. 322.

Clitorio quicunque sitim de fonte
 levârit,
 Vina fugit; gaudetque meris abstemius undis.

On the contrary, the Water of Lyncestis in Macedonia inebriates, says the same Poet, lib. citat. v. 329.

Huic fluit effectus dispar Lyncestius amnis,
 Quem quicunque parum modera-
 to gutture traxit,
 Haud aliter titubât, quam si
 mera vina bibisset.

And Plin. lib. 1. cap. 103. reports from Mutianus, that there is a Fountain in the Island Andros, whose Waters have the taste of Wine, and inebriate likewise. The River Athamas in Phthia kindles Wood, if it be thrown in, in the Wane of the Moon; Ovid. Metam. 15. v. 311.

Admotis Athamanis aquis accendere lignum

Narratur, minimos cum Luna recessit in orbes.

A River at Colossæ turns Wood into Stone. Plin. lib. 31. cap. 2. And Ovid says the Ciconians have a River, that petrifies the Bowels of those that drink of it: and brings a stony Hardness on all things that touch the Waters:

Flumen habent Cicones, quod potum faxea reddit

Viscera, quod tactis inducit marmora rebus.

Metam. 15. v. 313.

But Pliny says only, that a stony Bark grows over Wood, thrown into this River: and that the Lake Velinus, now Lago di Pie di Luca, the Rivers Silarus and Surius turn Wood or Leaves into Stone. Nat. Hist. lib. 2. cap. 103. A Fountain at Perperene in Lydia turns Earth that is moisten'd with its Waters into Stone, Pliny, lib. 31. cap. 2. There are two Fountains at Orchomenus in Eubœa; the Water of one of them confers Memory: that of the other causes Forgetfulness, Plin. loco citat. Mutianus witnesses, that there is one at Cyzicus, which delivers from the uneasy Passion of Love. A Pool at Samosata breeds a sort of Slime, that burns when put into Water, and is extinguish'd with Earth. Plin. lib. 2. cap. 104. Whatever is thrown into the Lake Sides or Sideris in India, instantly sinks to

Besides; their own quick FORCE will make them move,
 And pass the yielding WAVES, and join above:
 As little STREAMS, that cut their secret Way,
 880 And rise up sweet i'th' Bottom of the Sea;
 Beat off the SALT, and the resisting FLOOD
 To thirsty Sailors proves a mighty Good:
 Just so these SEEDS of FIRE might rise and flow,
 And cut the yielding WAVES, and, passing thro',
 885 Strait strike, and kindle oily TORCH, or Tow;

Because

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to the bottom. Idem, lib. 31. cap. 2. The Waters of a Fountain at Zama in Africa, render the Voice harmonious, Idem, lib. 31. cap. 2. There is a Lake at Troglodytæ, the Water of which grows bitter, and then again sweet, three times every Day, and as often every Night. Plin. lib. 31. cap. 2. And many other wonderful Stories are related of other Rivers and Waters: but I may not omit to mention what many now living have experimented, and know to be true: There are two Baths or Fountains at Baia, not far from Naples, into one of which, when a Dog is thrown, he is immediately depriv'd of Sense, and seems to be dead: but, thrown into the other, he comes to himself, and revives in as little time. And from thence the Place is call'd Grotto del Cane.

877. Besides, &c.] In these 17. v. Lucretius argues, that the Reason why the Water of this Fountain kindles Tow, &c. may be this: Those Seeds of Fire, rising up to the Surface of the Water, may there be condens'd, and gather'd together in such a manner, as to kindle any Combustibles, that are apt to take Fire, if they be advanc'd to them. Thus too Fountains of fresh Water bubble up in the midst of the Sea: and as those Seeds of fresh Water, rising up, join into one Body, and flow in a Stream of fresh Water;

so too these Seeds of Fire, rising up, and combining into one, may easily create a Flame. Thus a Candle, newly extinguish'd, if put to a burning Taper, or to Fire, catches again, and is lighted even before it touch the Flame.

879. As little Streams, &c.] Thus Alpheus, a River of Peloponnesus, after it flows into the Sea, is said to preserve its Waters unmix'd with those of the briny Flood, and, flowing in one continu'd Course, to dive into the Earth, and break out again at the Head of the Fountain Arethusa, in the West of the Island Ortygia. Virg. Æn. 3. v. 694. speaking of Ortygia,

Alpheum fama est huc,
 Elidis amnem,
 Occultas egisse vias subter mare;
 qui nunc
 Ore, Arethusa, tuo Siculis confunditur undis.

And this the Antients would have to be true, because in the Olympick Games, which were celebrated at Elis every fifth Summer, the Garbage of the Victims being thrown into Alpheus in Greece, was restor'd thro' the Mouth of Arethusa in Ortygia. Plin. lib. 2. cap. 107. Quidam fontes odio maris ipsa subeunt vada, sicut Arethusa, fons Syracusanus, in quo redduntur jacta in Alpheum. But Strabo. lib. 6. explodes this Fiction. This however gave occasion to the fabulous Loves of Alpheus and Arethusa.

Because those PARTS are of convenient Frame,
 Hold SEEDS of FIRE, and fit to raise a Flame :
 Thus take a TORCH, but lately dead, and strive
 To light the SNUFF again, and make it live,
 890 It kindles long before it comes to touch ;
 And sure Experience shews a thousand such,
 Which light at DISTANCE, ere they reach the Flame :
 And thus this FOUNTAIN acts ; the CAUSE the same.
 Now sing, my MUSE, for 'tis a weighty Cause,
 895 Explain the MAGNET, why it strongly draws,
 And brings rough IRON to its fond Embrace :

This

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thusa. Pliny reports the like of the Rivers Lycus and Erasinus ; the first, in Lydia, the other in Arcadia : which is likewise confirm'd by Ovid. Metam. lib. 15. v. 273.

*Sic ubi terreno Lycus est epotus
 hiatu,
 Existit procul hinc, alioque re-
 nascitur ore.
 Sic modò combibitur, recto modò
 gurgite lapsus
 Redditur Argolicis ingens Erasi-
 nus in arvis.*

Thus Lycus, swallow'd up, is
 seen no more ;
 But far from thence knocks at
 another Door :
 Thus Erasinus dives, and, blind
 in Earth,
 Runs on, and gropes his way to
 second Birth ;
 Starts up in Argos Meads, and
 shakes his Locks
 Around the Fields, and fattens
 all the Flocks. Dryd.

894. Now sing, &c.] The following 156. v. contain a Disputation concerning the Loadstone. And here too, says Creech, the Drift of the Poet is the same as in all his other Disputations ; which has not been hitherto observ'd. For Hercules is said to have found out this Stone ; and no doubt his Godship is well-pleas'd that Men

should hold themselves oblig'd to him for so great a Benefit ; and that the Virtues of that Stone are ascrib'd to him. Jupiter has already lost his Fountains, and why should the Poet give Quarter to the Son, since he never would spare the Father ?

In the three first of these Verses, the Poet tells us, he is going to dispute of the Virtue or Power of the Loadstone : which, tho' Lucretius acknowledge but one, is known nevertheless to have a twofold Power, or two different Virtues, which are thus distinguish'd : I. The Power, by which it attracts the Steel to itself : II. The Power, by which it directs both itself and the Steel towards the Poles of the World : The first of these is call'd its attractive Power, the second, its Directive. As to the first of them, tho' it may seem a very hard Paradox, nay, even an Absurdity, to assert, that Attraction is unjustly ascrib'd to the Loadstone, and that we speak not properly, when we say, that it draws and attracts Iron, yet we should not want great Authority, nor even Experiment itself, to confirm this Assertion : For, in the first Place, Renatus Des Cartes, in his Principles of Philosophy, has these express Words : *Præterea magnes trahit ferrum, five potius magnes & ferrum ad invicem*.

vicem accedunt; neque enim ulla ibi tractio est: This too is solemnly determin'd by Cadius: Nec magnes, says he, trahit propriè ferrum, nec ferrum ad se magnetem provocat; sed ambo pari conatu ad invicem confluent: And with these Authours agrees the Assertion of Doctor Ridley, Physician to the Empe-pour of Russia, and who, in his Tract of magnetical Bodies, defines magnetical Attraction to be a natural Incitation and Disposition, conforming to Contiguity; or a Union of one magnetical Body with another, and not a violent and forcible Attraction, and hauling of the weaker Body to the stronger. And this is likewise the Doctrine of Gilbertus, who terms this Motion a Coition, which, says he, is not made by any attractive Faculty, either of the Loadstone, or the Iron, but by a Syndrome, or Concourse of both of them: a Coition always of their Vigours, and of their Bodies likewise, if not obstructed by their Bulk, or some other Impediment: and therefore those contrary Actions, which flow from opposite Poles or Faces, are not so properly Expulsion and Attraction, as sequela & fuga, a mutual following of, and Flight from, each other.

Moreover; the foregoing Opinions are confirm'd by several Experiments: For, I. if a piece of Iron be fasten'd to the side of a Bowl, or Basen of Water, a Loadstone, swimming freely in a Boat of Cork, will presently make to it. II. If a Steel, or Knife, untouch'd, be offer'd towards a Needle that is touch'd, the Needle moves nimbly towards it, and strives to unite to the Steel, that remains without Motion. III. If a Loadstone be fil'd very fine, the Powder, or Dust of it, will adhere and cleave to Iron that was never touch'd, in like manner as the Powder of Iron does likewise to the Load-

stone. And IV. lastly, if a Loadstone and Steel be plac'd in two Skiffs, or small Boats made of Cork, and within the Orbs of their Activities, neither of them will move, while the other stands still; but both of them, if I may use the Expression, hoist sail, and steer to each other; insomuch that if the Loadstone attract, the Steel too has its Attraction; because, in this Action, the Alliciency is reciprocal, and, being jointly felt, is the reason, that they mutually approach, and run into each others Arms. Thus therefore, upon the whole Matter, more moderate Expressions than are often us'd, would more suitably express this Action, which nevertheless some of the Antients have deliver'd in the most violent Terms of their Language: Thus St. Austin calls the Loadstone, mirabilem ferri raptorem: and Hippocrates, λίθος ὅτι τὸ σίδηρον ἀρπάζει. Lapis, qui ferrum rapit: Galen, disputing against Epicurus, uses the Term, ἐλκεῖν, which seems likewise too violent: Aristotle alone among the Antients speaks more warily, and calls it, λίθος ὅστις τὸ σίδηρον κινεῖ, the Stone that moves the Iron, and him Aquinas, Scaliger, Cusanus, and others have follow'd.

I return now to Lucretius, and must first observe, that our Translatour has omitted the third and fourth Verses of this Argument, in which the Poet explains how this Stone came to be call'd the Magnet: These Verses run thus in the Original:

Quem Magneta vocant patrio de
nomine Graii;
Magnetum quia sit patriis in finibus ortus.

i. e. which Stone the Greeks call the Magnet, from the Name of the Countrey: because it is produc'd and found in the Countrey, inhabited

inhabited by the Magnetes. This Countrey is a Region of Lydia, and call'd Magnesia, whence the Inhabitants had their Name. Aristotle, by way of Excellence, calls it barely, λίθον, the Stone: Some, Herculeus Lapis, either because Hercules first discover'd it: or from the City Heraclea, where it is said to be found: or lastly from its great Strength, or wonderful Power. The Italians call it Pietra d' Amante, the loving Stone: the Name of the Loadstone, by which it is commonly known among us, is a Word of Saxon Extraction: but the French know it only by the Name of L' Aimant, the Lover: And this modern Name agrees with what Orpheus sings in Claudian, Epig. 4. That Iron rushes to the Loadstone, as a Bride to the Embraces of the Bridegroom.

Pronuba fit natura Deis, ferrum-
que maritat

Aura tenax.

Flagrat anhela filex, & amicam
faucia sentit

Materiem; placidosque chalybs
cognoscit amores:

Jam gelidas rupes, vivoque ca-
rentia sensu

Membra feris: jam saxa tuis ob-
noxia telis,

Et lapides suus ardor agit, fer-
rumque tenetur

Illecebris, &c.

Now Lucretius, the better to explain the attractive Virtue of this Stone, premises four Heads, or chief Positions, which, tho' he has prov'd them already, yet, because of the great difficulty of the Task he is now going to undertake, he thinks fit to inculcate here again, I. That certain Corpuscles are continually flowing out of all things; in 26. v. II. That no concrete Body is so solid, as not to contain some empty little Spaces; in 23. v. III. That the Corpuscles, that

are emitted from things, do not agree with all things alike, and in the same manner, and produce not the same Effects on them: in 14. v. IV. That the void little Spaces are not alike in all Things, but differ in Size and Figure, and therefore can not be fit for all Bodies indifferently: in 13. v. This being premis'd, he endeavours to tell the reason why, or the manner how, the Loadstone attracts Iron, or the Iron is convey'd to the Loadstone: which consists in this. Many Particles flow from the Loadstone, and dissipate the Air all around it: and thus many void little Spaces are made: But when the Iron is plac'd within the Sphere of that dissipated Air, there being a great deal of empty Space between that and the Loadstone, the Corpuscles of the Iron leap more freely forward into that Void, (for the Seeds of all Bodies fly forward on a suddain into empty Space) and for that reason are carry'd towards the Loadstone: now they can not tend that way, without dragging along with them their coherent Seeds, (for the Seeds of Iron are most intricately intangled, and twin'd together) and consequently the whole Mass of Iron: in 17. v. But because the Iron moves any way, upwards, downwards, across, or in any obliquity, without the least distinction, according as it is plac'd to the Loadstone, he teaches in 5. v. that this could not be, but by reason of the empty Space that is made by Corpuscles that flow from the Magnet, and into which all Bodies, that otherwise tend only downwards, are protruded indiscriminately, by the Strokes and Blows of other Bodies. And this is in general what Lucretius teaches concerning the Loadstone: we will examine his Arguments apart, in the Order, he has observ'd in the disposition of them

This Men admire ; for they have often seen
 Small RINGS of IRON, fix, or eight, or ten,
 Compose a subtile CHAIN, no Tye between :
 900 But, held by this, they seem to hang in Air,
 One to another sticks, and wantons there ;
 So great the LOADSTONES Force, so strong to bear !

In

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897. This Men, &c.] In these 6. v. he takes notice of the first Power and Virtue of the Loadstone : and says, That it draws five, or more iron Rings, adhering one to another. This is the Virtue of the Magnet, which is call'd the Attractive : but of the other, the Directive, he says nothing : nor indeed do any of the Antients treat of this last Power of the Loadstone : The Moderns alone have inquir'd into that Matter : and that too, only since the Invention of the Magnetick Needle : which, according to some, was first discover'd a little more than five Ages ago : that is to say, A. D. 1200. At which time Guyotus, a Native of Provence in France, writ a Poem, which he call'd *Marineta*, in Praise of this Invention : And hence, say the French Authours, the Flower de Luce, which is the Arms of France, is every where, even among the barbarous Nations, represented at one of the ends of that Needle. Petrus Peregrinus, another Frenchman, about three hundred Years ago, writ a Treatise of the Magnet, and of a perpetual Motion to be made by it : which Treatise has been preserv'd by Gassendus : Paulus Venetus, and Albertus Magnus, who flourish'd about five hundred Years ago, both of them, mention this Verticity of the Loadstone ; and cite for it a Book of Aristotle's, intitul'd, *De Lapide* : but Cabeus and others rather judge that Book to be the Work of some Arabick Writer, who liv'd not many Years before

the Days of Albertus. And indeed it is very probable, that the Knowledge of the Loadstones polary Power and Direction to the North was unknown to the Antients : and Pancirollus justly places it among the modern Inventions ; tho' Levinus Lemnius, and Coelius Calcagninus are of another Belief : but their strongest Argument is only the following Passage in Plautus :

*Hic ventus jam secundus est ;
 cape modo versoriam.*

Now the Word *versoriam* they interpret to be the Compass : but, according to Pineda, who has particularly discuss'd this Matter, and to Turnebus, Cabeus, and several others, it rather signifies the Rope that helps to turn the Ship, or that makes it tack about ; for the Compass shews that the Ship is turn'd, rather than contributes to its Conversion. As for the long Expeditions and Voyages of the Antients, which may seem to confirm the Antiquity of this Invention, it is not improbable, but they were perform'd by the help of the Stars, by the flight of Birds, or by keeping near the Shore : for thus the Phœnician Navigatours, and Ulysses too, might sail about the Mediterranean ; and thus likewise might Hanno coast about Africa. And as to what is contended, that this Verticity of the Loadstone was not unknown to Salomon, who is presum'd to have had a Universality of Knowledge, it may as well be averr'd, that he knew the Art of Typography,

In order to the CAUSE, must first be prov'd
 A thousand things, a thousand Doubts remov'd,
 905 And long Deductions made; do you prepare
 A strict observing MIND, and list'ning EAR.

First then; from OBJECTS SEEN thin FORMS arise,
 In constant subtile STREAMS, and strike our Eyes:

Thus

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graphy, of making Guns and Powder, or that he had the Philosopher's Stone, tho' he sent to Ophir for Gold. It can not indeed be deny'd, but that, besides his political Wisdom, he was very knowing in Philosophy: and perhaps too, as some believe, from his Philosophical Writings, the antient Philosophers, especially Aristotle, who had the assistance of the Acquisitions of Alexander, collected many Things worthy of Note: yet it must be granted, that if he knew the Use of the Compass, his Ships were very slow Sailors, since they made a three Years Voyage of it from Eziongeber in the Red Sea to Ophir, suppos'd to be Taptobana, or Malaca, in the Indies, which is not many Months Sail; and since too in the same, or a less, time, Drake and Cavendish perform'd their Voyage round the Earth.

Moreover: some are of Opinion, that this directive Power of the Loadstone depends upon, and is deriv'd from, the two Poles of the Heavens: Others from the Arctick Pole only: Cardanus, from the Tail of the Bear: Des Cartes, from I know not what tractorious Point, as he calls it, and which he imagines to be I know not where too, beyond the Heavens: Fracastorius, from certain magnetick Mountains under the Arctick Pole: Gulielmus Gilbertus, from the Earth it self, which, as one huge Loadstone, conforms and brings into its native and natural Site, that is to say, towards the North and South, the

Loadstone itself, as a small Earth, and the Iron, as its Offspring. In regard to the attractive Virtue of the Loadstone, the Opinions likewise are different. Thales, Aristotle and Hippias ascrib'd it to the Soul, with which they held it to be endow'd. But it is not certain what Hands, or what Senses Nature has given to this Stone. Cardanus intimates that it is only a certain Appetite, or Desire of Nutriment, that makes the Loadstone snatch the Iron: and according to this Opinion Claudian Epig. 4.

*Ex ferro meruit vitam, ferrique rigore
 Vescitur: has dulces epulas, hæc pabula novit.*

And Diogenes Apolloniota, lib. 2. Nat. Quæst. cap. 23. confirms the same Opinion, when he says, that there is Humidity in Iron, which the Dryness of the Magnet feeds upon. Others fly to Sympathy, and certain occult Qualities. The Opinions of Democritus, Epicurus, and Lucretius, are explain'd in the following Notes.

903. In order, &c.] In these 4. v. the Poet only tells us, that to give a methodical Account of the attractive Power of the Loadstone, it will be necessary to take the Matter higher, and to repeat some of the Maxims, he has taught already.

907. First then: &c.] In these 13. v. he premises I. That Corpuscles are perpetually flowing from all Things: And this he has taught before, Book IV. v. 47. & seqq.

Z z z z z

908. Thus

- Thus ODOURS fly from GUMS ; a gentle BREEZE
 910 From RIVERS flows, and from the neighb'ring SEAS
 Sharp SALTS arise, and fret the Shores around :
 Thus all the AIR is fill'd with murm'ring sound ;
 And while we walk the STRAND, and pleas'd to view
 The wanton WAVES ; or squeeze, or mingle RUE,
 915 Or SALT, or bitter TASTES our TONGUES surprize : }
 So that 'tis certain SUBTILE PARTS arise
 From all, and wander in the lower Skies ;
 And never cease to flow, because the EAR,
 And EYE, and NOSE still smell, and see, and hear.
 920 Next I'll repeat what I have prov'd before,
 No COMPOUND's perfect SOLID, free from Pore :
 For tho' 'tis useful to direct our Eye
 Thro' all the SECRETS of PHILOSOPHY,
 To prove that SOLID SEEDS can never join, }
 925 Unless some EMPTY SPACE is left between
 It has its proper Force in this Design.
 Then first, in CAVES the subtile Moisture creeps
 Thro' hardest ROCKS, and even MARBLE weeps :
 And SWEAT from ev'ry lab'ring MEMBER flows,
 930 And stubborn HAIR o'er all the BODY grows :
 And NATURE drives our FOOD with curious ART
 Thro' all the LIMBS, increasing ev'ry Part :
 Strong FLAMES divide the rigid GOLD and BRASS ;
 And to a liquid Substance break the Mass :
 935 Thro' SILVER, HEAT and COLD ; and each disdains
 And scorns a Prison, tho' in precious Chains :
 This SENSE assures ; into a well-clos'd Room
 The Parts of ODOURS, SOUNDS, and HEAT will come :
 And often, as our sickly SOLDIERS feel,
 940 The moist and subtile AIR creeps thro' their STEEL.
 Therefore

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909. Thus Odours, &c.] This and the ten following Verses are repeated from B. IV. v. 230. & seqq. Consult there the Notes upon them.

920. Next, &c.] In these 23. v. he premises Illy That no Compound Body is so solid, as not to consist of some Void : that is to say, as not to contain some empty little Spaces. And this the Poet

has demonstrated at large. B. I. v. 402. & seqq.

933. Strong Flames, &c.] This, and the three next Verses are repeated, Word for Word, from B. I. v. 335. tho' Lucretius varies them in the Original : But the Sense indeed is the same.

939. And often, &c.] This and the following Verse run thus in the Original,

— Quin

Therefore 'tis certain, as I prov'd before,
No COMPOUND's perfect SOLID, free from Pore.

Besides : —————

The PARTS that rise from THINGS, not all alike,
Nor equally agree to what they strike ;
945 For first, the beauteous SUN with vig'rous Ray
Melts SNOW, and ICE, and WAX, and hardens CLAY :
Thus LEATHER shrinks in Fire ; but GOLD and BRASS
Dissolve ; FLAMES soften all the rigid Mass :
Thus WATER strengthens STEEL, grown weak by Heat ;
950 But gently softens SKINS, and boiling MEAT :
Leaves of WILD OLIVES yield a sweet Repast
To GOATS ; to MAN a rough and bitter Taste :
Thus PIGS fly sweetest ODOURS ; those, that please
And tickle MAN, offend and poison these ;
955 Yet they will roul in DUNG, in Filth delight ;
Tho' squeamish MAN can scarce endure the sight.

Besides : We must remember, —————

Since

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— Quin ferri quoque vim penetrare suevit,
Undique qua circum corpus lorica coercit,
Morbida vis quæcunque extrinsecus infinuatur.

This Passage has puzzled the Interpreters, and after all, they know not well what to make of it : Creech in this Translation has follow'd the Opinion of none of them, and indeed disapproves them all in his Latine Edition of Lucretius : For, says he, what can Lucretius mean by a Coat of Mail ? No Man ever believ'd. that the infectious Power of Disease ever pierc'd thro' a Coat of Mail. He dislikes also all the other Explications given by the several other Annotatours to this Passage : which at length he corrects, and instead of morbida vis, reads fervida vis ; which Lætion, says he, makes all things plain and easy : For often, when Men, arm'd from head to foot, scal'd the Walls of a City, the Besieg'd pour'd down upon them melted

Pitch, Sulphur, scalding Water, &c. the Heat of which pierc'd thro' their Armour, and made them sensible of it. This Exposition seems the most natural of any that have been given to this Passage, and agrees best with the preceeding Part of the Argument. But he is evidently mistaken in the Interpretation he gives it in this Translation ; and this may serve for one of the many Instances might be given, that he had not study'd his Authour so thoroughly, when he render'd him into English, as afterwards, when he came to publish his Latine Edition.

943. Besides : The Parts, &c.] In these 14. v. The Poet premises IIIly That the Corpuscles, which flow from Things, do not agree with all things, nor affect them alike, or in one and the same manner. This he has demonstrated in many Places of the preceeding Books : but chiefly in the fourth.

957. Besides : We, &c.] In these 13. v. he premises IVly That there are different little Spaces, or Pores of

- Since THINGS compos'd do num'rous PORES comprize,
 Those must have different SHAPE, and different SIZE :
 960 In ANIMALS, are various ORGANS found,
 And each the proper OBJECTS gently wound ;
 One TASTE, another SMELL, another SOUND.
 Some Things thro' STONES, or SILVER, GOLD, or BRASS,
 Some move thro' WOOD alone, and others GLASS :
 965 And those that pass the same, not always flow
 With equal Ease, and cut their Passage thro' :
 And this depends on the VARIETIES,
 And difference of PORES in SHAPE and SIZE,
 Which Things of different Texture still comprize.
 970 These Things thus prov'd, I now will sing the Cause,
 Explain the MAGNET, shew thee why it draws
 And brings rough IRON to its fond Embrace.
 First, from the MAGNET num'rous Parts arise,
 And swiftly move ; the STONE gives vast Supplies ;
 975 Which, springing still in constant Streams, displace
 The neighb'ring AIR, and make an EMPTY SPACE ;
 So when the STEEL comes there, some PARTS begin
 To leap on thro' the VOID, and enter in.

But

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of various Figures in all compound Bodies : From whence it comes to pass, that all things can not be adapted to, nor fit, and agree with, every one of them : This he has prov'd before in the second and fourth Books : and confirms again in this Place, by the same Examples he there alledg'd in Proof of this Doctrine.

970. These Things, &c.] In these 3. v. he concludes, and says, That these Things being premis'd, it is easy to discover and understand, how, and for what reason the Loadstone attracts Iron. And this is what he is going next to explain.

973. First, &c.] Epicurus explain'd two several ways the attractive Virtue of the Loadstone; and 'tis strange Lucretius has omitted one of them : or rather it has been lost out of the Text, since what Lucretius has so carefully premis'd, seems more properly adapted to that Cause, than

to the other that remains. If you are desirous to know more of it, see Gassendus, Tome II. p. 129. where you will find many things, by which this Doctrine of Epicurus is illustrated, and fully explain'd. But to proceed : Lucretius having premis'd the four Propositions above mention'd, undertakes in this Place to shew the Reason why, or manner how, the Loadstone attracts the Iron, and the Iron, on the other Hand, is carry'd and mov'd towards the Loadstone. To this end, in these 14. v. he teaches, I. That many Corpuscles flow as well from the Loadstone, as from the Iron : but the greater Quantity, and the more strong, from the Magnet : Whence it comes to pass, that the Air is always dispers'd, and driven away to a greater distance round about the Loadstone, and consequently, that fewer empty little Spaces are made around the Iron. And because, when the Iron

But since they're twin'd, the foremost PARTS must bring
 980 The latter on, and so move all the RING :
 For PARTS of STEEL are very strictly join'd,
 Scarce any COMPOUNDS are so closely twin'd,
 No wonder then, that when the foremost strove,
 The other Parts should stir, and all should move ;
 985 Which still they do, they still press farther on,
 Until they reach, and join the willing STONE.

The STEEL will move to seek the STONE's Embrace,
 Or up, or down, or t'any other Place,
 Which way soever lies the EMPTY SPACE.
 990 Not that the heavy STEEL by NATURE flies,
 But BLOWS WITHOUT will force, and make it rise.
 Besides ; the AIR, before the STEEL, is rare,
 And emptier than it was, and weaker far ;
 And therefore all the AIR, that lies behind
 995 Grown strong, and gath'ring like a subtile WIND,
 Must force it on, for still the ambient AIR
 Endeavours, still contends to drive it near :

But

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Iron is plac'd within the Sphere, as they say, of the Air, that is remov'd and driven away, there must be a great deal of void Space between that and the Loadstone ; the Corpuscles of the Iron fly the more freely into that empty Space, and therefore necessarily towards the Magnet : But those Corpuscles of the Iron can not hurry that way in a great Quantity, without dragging along with them the Particles that adhere to them, and by consequence the whole Mass of Iron.

987. The Steel, &c.] These 5. v. Gassendus thus explains : Inasmuch as the Iron tends indiscriminately upwards, downwards, across, in a Word, any way, according as it is plac'd above, below, on one side, &c. of the Magnet ; the Poet teaches, that it could not move in that manner, but by reason of the Induction of the Void : into which the Corpuscles of the Iron, that would otherwise move downwards

only, are carry'd indifferently, and without the least Distinction. Thus Gassendus believes, that these five Verses relate to the Explication last above propos'd : But I, says Creech, am of another Opinion : For the whole Matter there relates to the Corpuscles of the Iron leaping forward into the Void, that is made by the Effluvia from the Loadstone : But here, in these Verses, the little Bodies are protruded into the Void by Blows : therefore they more properly belong to what follows. Creech. in Edit. Lat.

992. Besides, &c.] Lucretius labours hard to prove, that the Motion of the Steel is help'd forward by the Air, because of its certain continual Motion and Agitation. And first in these 10. v. he says, it is assisted by the exterior Air, which, since it is always driving forward, and that too with more Force, the more there is of it, cannot but push on the

But then alone can move it, when the SPACE
Is free, and fit to take the COMING MASS.

1000 This fills the PORES, and then with subtile GALES
Drives on the STEEL, as WINDS great SHIPS, and SAILS.

Besides ; all COMPOUNDS hold some Parts of AIR ;
For ev'ry COMPOUND is by Nature rare :

This lurking AIR, no doubt, with nimble Wing,
1005 And constant Turns, still whirls and beats the RING :
But, once determin'd forward, keeps the Course
It first receiv'd, and that way bends its Force.

But more than this : coy STEEL will sometimes move,
And fly the striving STONE, and cease to love.

1010 And thus STEEL FILINGS, I have often known,
In little brazen Pots held o'er the Stone,
Will strive, and leap, as eager to be gone ;
Because the little brazen PARTS, that rear,
Fill all the STEEL's small PORES, and settle there :

And

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the Iron into that Place where there is least Air, and consequently most Void : which must be towards the Loadstone. Then in 6. v. by the interiour Air, which for the same reason, since it always agitates, moves, and drives forward, can not but begin the Motion towards that Place, which is render'd most void and empty.

1008. But more, &c.] Gassen-
dus here observes, that Lucretius
seems to have seen that Exper-
iment, in which the Loadstone
sometimes manifestly repels, or
at least seems to repel, the Iron :
What he means is this : It is dis-
cover'd, that there are in the
Loadstone two opposite Parts,
[we now commonly call them
Poles ; one the northern, the o-
ther the southern,] to one of
which, if one End of the Iron
Needle be mov'd, it is drawn and
attracted by it : and if the same
End of the Needle be afterwards
apply'd to the other Pole, it leaps,
and seems to be repell'd from it :
But that great Man, says Creech,
indulges himself too much in his

own Opinion : For the Poet pro-
poses nothing in these Verses
concerning the Flight of the Iron
from the Loadstone, nor do any
of the following Examples speak
fully of it : But Lucretius had
seen little Rings, and filings or
segments of Iron, when put into
a Vessel of Brass, move and dance
about, if a Loadstone were ap-
ply'd to the bottom of the Ves-
sel : and, perceiving this to be
caus'd by the interposition of the
Brass, (tho' the same will happen
if Glass, Wood, Stone, or any
other Substance be interpos'd) in
these 12. v. he gives this Reason
of it. That some Corpuscles are
emitted from the Brass into the
Filings, or little Bits of Iron, and
that these Corpuscles so fill up
the little void Spaces of the Iron,
that the magnetick Corpuscles,
which come afterwards, and are
transmitted thro' the Brass, find-
ing these little empty Spaces al-
ready taken up, heave and drive
forward the Bits of Iron with all
the strength they can.

1010. Steel Filings] Lucretius
call them Samothracia ferrea,
which

- 1015 And so the other rising STREAMS, that come
 From MAGNETS, find no Way, no open Room,
 And therefore strike: thus, flying thro' the BRASS,
 They rudely beat, and drive away, the MASS;
 Which otherwise they'd take to their Embrace.
- 1020 Besides, no wonder THIS ALONE should feel
 The LOADSTONE'S Power, and THAT move only STEEL,
 For some their WEIGHT secures, as GOLD: and some
 Their PORES; they give the Streams too large a Room;
 And so they find an easy passage thro',
- 1025 And thus the SUBSTANCE ne'er endures the Blow:
 But STEEL, when brazen Parts fill ev'ry Pore,
 And settle there, when it can take no more,
 It's then prepar'd to take the subtile Shove
 The LOADSTONE'S Streams can give; and fit to move.
- 1030 Nor is there FRIENDSHIP 'twixt these two alone;
 A THOUSAND Things besides, but ONE TO ONE,
 Agree: Thus LIME will fasten only STONE:
- Thus

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which were hollow Iron Rings, made to open, and in which they wore their Amulets: At first the Flamen Dialis wore them: Anulo, nisi pervio castoque, ne utitor. At length Servants took upon them to wear them: and, in the Age of Pliny, they were laid over with Gold: Servitia jam ferrum auro cingunt: alia per sese mero auro decorant: cujus licentiæ origo nomine ipso in Samothrace, id institutum declarat. Plin. Nat. Hist. Lib. 33. cap. 1.

1020. Besides, &c.] It may be ask'd, why a Loadstone does not make the Filings of other Bodies move in like manner? The Poet teaches in these 10. v. that the reason is, because they are either too heavy to be mov'd, or if they are light, they are then too rare; insomuch that the Corpuscles of the Magnet find a free and open Passage through them.

1030. Nor is, &c.] Hitherto of the Motion of the Iron to-

wards the Loadstone, or of its Flight from it. Now, as to its Adhesion to it, he tells us in 20. v. that it ought not to seem strange, because there is a like Consent, and Agreement between other Things also, which refuse to be join'd, or connected, except to one certain Thing only. Thus Stones are cemented with Plaister and Lime: Boards with Glue; and that too so strongly, that the Planks themselves will break, rather than the Glue disjoin: Water mingles with Wine, but not with Oil and Pitch: Wool is dy'd with the Blood of the Purple-fish: and Gold is soulder'd with Silver, but not with Lead: which nevertheless soulders Brass to Brass. And thus the Adhesion of the Steel to the Loadstone is made in this manner: on the Surface of the Magnet there are Hooks; and on the Surface of the Steel little Rings, which the Hooks catch hold of.

5 A

1033. Thus

Thus GLUE, hard BOARDS; and we may often view
The solid TABLE break before the GLUE :

1035 Thus pure and FOUNTAIN-STREAMS will mix with
But OIL and heavy PITCH refuse to join : (WINE,
The PURPLE's Blood gives WOOL so deep a Stain,
That we can never wash it out again :
No ; pour on all the Sea, 'tis all in vain.

SOULDER

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1033. Thus Glue,] *Lucr. Glutine taurino* : For the strongest Glue was made of the Ears and Genitals of Bulls : *Glutinum præstantissimum fit ex auribus taurorum, & genitalibus. Plin. Nat. Hist. lib. 28. cap. 17.*

1036. Oil and heavy Pitch] Both of them refuse to mix with Water ; but differently : For Oil rises above the Surface of the Water ; therefore *Lucretius* here calls it *leve olivum* ; but Pitch sinks to the bottom.

1037. The Purple's Blood] The Purple of the Antients was dy'd with the Blood of a Shell-fish, call'd *purpura* ; it was found in a white Vein, running thro' the middle of the Mouth, which was cut out and boil'd ; and the Blood, us'd in dying, produc'd the Colour *nigrantis rosæ sublucentem*, which *Pliny* says is the true Purple, tho' there were other sorts too of it, as the Colour of Violet, Hyacinth, &c. Of this Invention, see *Plin. lib. 9. cap. 38.* and *Pancirollus*. The greatest Fishing for these Purples was at Tyre ; and there was the chief Manufacture and Trade of Purple, as likewise the first Invention of it ; which is attributed to *Hercules Tyrius*, who, walking upon the Shore, saw his Dog bite one of those Fish, and observ'd his Mouth all stain'd with that excellent Colour, which gave him the first Hint of teaching the Tyrians how to dy with it : From this Invention of this Colour it is call'd in Greek *ἰσὺρ*,

because, says *Aristotle* de Color. it is, as it were, *ἁλὸς ἔργον*, the Work of the Sea ; and *Plato* in *Timæus* defines *ἰσὺρ*, to be red mingled with white and black. See *Guil. Tyrensis, Pontif. lib. 13. Belli Sacri, cap. 1.* where he speaks of Tyre. The Purple of Africa, a Countrey nearer to the Sun, was, as we are told, for that reason, of a violet Colour : the Ingredients of which consist of much white, and a little red : but the common Purple now-a-days is, as the best Artists tell us, a Mixture of a great deal of red, and a little black : yet the Tyrian purple is generally held to have been more inclining to red, which is a certain mixture of white and black ; or rather to scarlet : But this sort of Purple, ever since the fishing for the *Purpura*, is, by the taking of Tyre, come into the Power of the Turks, has been totally lost : Not for want of Materials, for the Fish is still to be found ; but because the true art of ordering it is no longer known. *Pancirollus* tells us, we may guess at the Colour of it by the Italian July-Flower : and that it was not, as some believ'd, like the *Amethyst*, but rather like the Ruby, *Pyropus*, or Carbuncle : Some will have it to have resembled the Colour of the Elemental Fire ; and others, that of what they never saw, the *Empyrean Heaven*. But to guess what the Colour of this true Purple was, by the Description, which the

the Antients have left of it, we may call to mind, that Juvenal calls it *ardens purpura*, flaming Purple: And we find in Cicero, *Qui fulgent purpurâ*, who shine in Purple: which Statius yet improves:

Illius è roseo flammatur purpura vultu:

And many the like Instances might be produc'd from the Antients of the Refulgency of this Colour. Some mention an extraordinary way of dying the purple Colour with the Blood of Apes: and the Indians make Trial of the best common Purple, by dropping some Oil on a piece of purple Silk, which, they say, will not stain it, if the Purple be good: but these two Particulars I mention only for the Sake of their Extravagancy. Whatever the Purple of the Antients was, our Purple is made of what the Druggists call *Turnesol*, which is a mixture of vermilion and blue Byssé, or *Cynnaber*. As to the antient wearing of Purple, *Lomazzo*, lib. 3. cap. 14. observes, that the Kings of Troy, and the chief of the Nobility, were wont to dress themselves in several Colours on the several Days of the Week, and wore a particular Colour on each Day; and that the chief of them was the purple: Thus on Sunday they wore yellow, on Munday white, on Tuesday red, on Wednesday blue, on Thursday green, on Fryday purple, and on Saturday black. Now the reason, why they dress'd themselves in purple on Fryday, may have been, because that Day was sacred to Venus, whose Buskins are said to have been red, between which and purple, there was but little difference, says the same *Lomazzo*, in the Place above cited. He farther observes, cap. 19. of the same Book, that they wore likewise several Colours on the Festivals of the several

Months of the Year: In those that happen'd in January, they wore white, in February ash-colour, in March tawny, in April dark-green, in May light-green, in June carnation, in July red, in August yellow, in September blue, in October violet, in November purple, and in December black. Now the Month of November was under the Protection of Diana amongst the Romans, who deriv'd themselves from the Trojans, and that Goddess, like Venus, wore red, or rather purple, Buskins: and therefore, for the like reason, it may be conjectur'd, that they wore purple on the Holydays of that Month. Besides, in November there was a Festival dedicated to Jupiter, and therefore they might probably go then dress'd in purple: For many of the Roman Customs, as well as their pretended Original, were deriv'd from the Trojans: And lastly, that Author takes notice, that in succeeding Ages, whenever the Emperour himself went into the Field, the Standard was of a purple Colour. Thus we see, that Purple was antiently the Wear of Princes: and therefore honest *Umbritius* in *Juven. Sat. 3.* conceiv'd so great Indignation, that the meaner sort of People began to cloath themselves in that regal Colour, that he alledges it as one of the reasons of his retiring from Rome: *Horum ego non fugiam conchylia?* v. 81. And Augustus, as we find in *Suetonius*, in his Life, forbid the promiscuous use of it: for which *Tacitus* commends that Emperour, and at the same time gives the Reason of that Prohibition in these Words: *Præclarè vero prudentérque Cæsar ordines civium veste discriminavit, ut scilicet qui locis, ordinibus, dignationibus antestant, cultu quoque discernèrentur*, *Annal. 2.* Yet at length, Liberty prevail'd at Rome, and the meaner sort, if

1040 SOULDER ignobly weds the GOLDEN MASS

To SILVER: proper SOULDER LEAD, to BRASS:
Besides these mention'd, there's a thousand more:
But stay; what need of such a num'rous Store?

Why should I waste my Time, and trouble thee?

1045 Take all in short; Of THINGS, whose PARTS agree,
Whose

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their Money could reach it, cloath'd themselves in purple: and liv'd as in the Spartan Commonwealth, where, by the Laws of Lycurgus, it was forbid to all alike, that any one Man should go better dress'd than another.

1038. Never wash it out again:] Thus Waller:

The Fleece, that has been by the Dyer stain'd,
Never again its native Whiteness gain'd.

1040. Soulder] What the Goldsmiths use to solder Gold, is call'd Borax, a sort of Chrysocol, which is a kind of Mineral, found like Sand in Mines of Brass, Silver, or Gold.

1045. Of Things, &c.] Here Lucretius tells us, that the Juncture is most strong, and the Union most firm and lasting, between Things, whose parts exactly correspond and square with one another: Those Things, says he, whose Textures mutually answer to one another, in such a manner, that the Cavities of this Thing agree with the Plenitudes of that; and the Cavities of that with the Plenitudes of this, may be conjoin'd most easily, and in the strictest manner: and some Things may be so join'd to others, as if they were fasten'd together with Hooks and Rings: and in this manner it is, that the Loadstone seems to be connected to the Steel.

Thus our Poet concludes his Disputation concerning this won-

derful Stone: which is alone sufficient to humble the tow'ring Arrogance of prying Man, and to baffle and mock his vain Pretence to Knowledge; since he never could attain to the Discovery of what it is, nor of the great Power, that the Divine Wisdom has bestow'd upon it: Well may it be styl'd Herculean, it being insuperable on many Accounts: The Antients knew scarce any thing of it; and the modern Philosophers, that they might seem to be ignorant of nothing, pretend to explain this hidden Secret of Nature; but have fail'd in the Attempt, and have only involv'd it in yet greater Difficulties: For what is more absurd, or more repugnant to common Observation, than to imagine to our selves, that the whole Earth is compacted of solid Iron, or than to call it the great Loadstone, whose purer Segments do now and then by Chance fall into our Hands. Is it thus that we philosophise, and think it better to pervert than suffer things to lie hid in the inscrutable Majesty of Nature? Lucretius endeavour'd to discover the Cause of a most notorious Effect, viz. Why Iron runs to the Loadstone, and obstinately adheres to it? But setting Sail imprudently, was shipwreck'd in the Port. His first Assertion is, That the Corpuscles of the Loadstone strike and chase away the Air: but this we know by Experience to be false: For the Water is not mov'd, when a Loadstone is put under the Vessel that contains

Whose SEEDS, oppos'd to PORES, securely lie,
 The UNION, there, is strong, and firm the TIE:
 Others by RINGS and Hooks are join'd in one :
 This way combine the LOVING STEEL and STONE.

1050 Now next I'll sing what Causes PLAGUES create,
 What drives a PESTILENCE, swoln big with Fate,
 To waste, and lay a NATION desolate.

I've

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contains it : Neither will you find the Air to be mov'd, if, for Trial's sake, by the Exhalation that steems from a Censer, or the Vapour of hot Water, you render it so thick, that from perspicuous it become conspicuous : for the Smoke will go alike forward, whether you apply the Loadstone, or take it away : and if no Force be offer'd to the Medium, the Loadstone will still strongly attract the Steel : Therefore the Place is not made empty, nor the Air expell'd : But grant the Space to be void : Whence proceeds that great sedulity of the Steel, to fill immediately the vacant place ? If it be answer'd, from the establish'd Order of Things, to the end, nothing in the Universe may be void of Body ; It may be reply'd, that it then overthrows their Opinion, who hold the Void to be the second Principle of natural Things. Besides : Corpuscles flow no less from the Iron, than from the Magnet : Therefore, if the Effluvia of the Iron have fill'd the vacant Space, why is not the Ring stopt, and why does it hasten onward ? If it be answer'd, that it is driven forward by external Air, why is not that Protrusion perpetual, even while the Magnet is away ? And whence proceeds this Inconstancy, that compels the Air to renounce its natural Gravity, and move by Ascent ? Nor is the internal Air, included in the Ring, of any greater moment : For since the Iron emits Corpuscles on all sides,

why does it incline and move one way rather than another ? Besides : how ill does what Lucretius here asserts, that the Air resides in, and fills up, the Pores or open Passages of concrete Bodies, agree with his Doctrine of a Void, which he endeavour'd before to persuade us to believe, and which he grounded on those very Pores of Bodies ? In vain therefore has been the Search of our Poet into this miraculous Secret of Nature, since it has led him unawares into Arguments, that tend to the Confutation of that Philosophy, which he has been labouring to establish.

1050. Now, &c.] Hitherto our Poet has been disputing of the Things, that are commonly said to be, *secundum naturam*, natural : He is now going to try the strength of his Philosophy in those, which by the Physicians are call'd, *præter naturam*, preternatural ; and these are held to be three : I. Disease. II. The Cause of Disease. III. The Symptom, or the Effect, Accident, or Passion, attending any Sickness : For Symptom, in the general Acceptation of the Word, signifies whatever happens to an Animal preternaturally : i. e. Disease, and the internal Cause of Disease, together with whatever supervenes in the Disease. As to what relates to the Cause of Diseases, and their Symptoms, Lucretius takes but little Notice : for he disdains common Diseases ; and is going to treat of Plagues only, and to inquire into

to the Causes of them. And here we may take Notice, that Physicians allow two sorts of Diseases, which they call, communes, & *sparfim vagantes*, common Diseases, and such as wander here and there, and come not after an ordinary manner: these last Hippocrates in his Language calls *σποραδικὰς*. The Diseases they call common, are those that are peculiar and naturally incident to one Place or Countrey; for which Reason they are likewise call'd Endemij, that is to say, regional; and, because they often sieze many Persons, popular or vulgar; but by the Greeks *ἐπιδημικὰι*, i. e. publick or universal. Now if these Diseases, besides that they sieze many Persons at the same Time, and in one and the same Place, have this to boot, that they kill many Persons likewise, they are then call'd a Plague; by the Greeks *λοιμὸς*; by the Latines *Pestis*, à *pascendo*, in like manner as, according to Isidorus, *Pestilentia* is said, *quasi pastulantia*, quòd veluti incendium depascit, because it consumes and devours like a burning Flame. But in the Art of Physick, Diseases likewise admit of another Distinction; taken from their longer or shorter Duration: for some Diseases are lingering, and of long Continuance; for which reason, they are call'd Chronick, from *χρόνος*, Time: Others dispatch the Patient in a little time, or else he recovers, and therefore they are call'd acute: I now return to Lucretius, who seems to imply, that the only Tokens of an offended and angry Deity, that he has left unmention'd, are epidemical Diseases and Plagues: And if there be nothing wonderful and divine in these Things neither, we may then indeed disclaim, and bid adieu to, all Providence. But our Poet tells us, that there is no need of much Ceremony, nor

to beat about the Bush, to discover the Causes of Plagues: For, says he, in 8. v. as in the Universe, there are many Corpuscles that are healthful to Man, and other Animals, so there are many too that are noxious and deadly. Now when these noxious Corpuscles, whether they arise out of the Earth, or whether they fall down from the Skies, fill the Air, it grows diseas'd and infectious; and thus Plagues and Contagions enter into the Bowels of Men and other Animals. If we will not allow of these foreign Corpuscles, he bids us in 7. v. search into the Air itself, and we shall find the Cause of this great Calamity and Destruction: For the Air of different Countreys is different, and that which is healthful to the native Inhabitants, is unhealthful to Foreigners, who are not us'd to it: And this, says our Poet, in 9. v. is the Reason, that certain Diseases are peculiar to certain Countreys: Then he teaches in 7. v. that when the Air of one Region is blown into another, the whole Air of the Sky must of necessity be corrupted: And thus, says he in 12. v. the Springs and Herbs are infected; or the corrupted Air itself proves mortal. Lastly, he confirms this Disputation, by the Example of that memorable Plague which happen'd in Athens, during the Heat of the Peloponnesian War, and describes it at large in 165. v.

Here we must observe, that our Translatour has not fully render'd the Beginning of this Disputation; which in the Original is as follows:

Nunc, ratio quæ fit morbis, aut
unde repente
Mortiferam possit cladem con-
flare coorta
Morbida vis hominum generi pec-
cudumque catervis,
Expediam.

In which Verses the Poet propos-
es

I've prov'd, that num'rous VITAL PARTS do fill
 The AIR : so num'rous too are those that KILL.
 1055 These POYSONS, whether from the threat'ning SKIES,
 Like CLOUDS, they fall, or from the EARTH arise,
 When she's grown putrid by the RAINS, or sweats
 Such noxious VAPOURS, press'd by scorching HEATS,
 Infect the lower AIR, and hence proceed
 1060 All raging PLAGUES ; these all DISEASES breed.

A TRAVELLER, in ev'ry Place he sees,
 Or hazards, or endures, a new DISEASE,
 Because the AIR, or WATER disagrees:

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 How

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ses, that he is now going to treat of the Causes of those Diseases, that are mortal both to Men, pecudumque catervis, and to Beasts: of which last our Interpreter has taken no Notice; tho' it be certain, that Plagues are not peculiar to Man alone; but promiscuous and common to Beasts likewise; as shall be shewn by and by in our Note on v. 1087.

1053. I've prov'd, &c.] In these 8. v. the Poet says, that the Cause of Diseases may be ascrib'd to the very noxious Nature of the Air itself; and teaches, how the Air comes to be morbid: For, says he, many Atoms, that bring both Disease and Death, are continually flying to and fro in the Air; as many others are likewise, that are healthful and vital, or conducing to the Maintenance and Preservation of Life: But those diseas'd and sickly Atoms fall from without into the Air; being either sent from above out of the Sky, or rais'd up from beneath out of the Earth, whenever it has contracted any filthy and unwholesome Stench, by being drench'd with excessive and unseasonable Rains, and pierc'd by the scorching Beams of the Sun. Hippocrates too held the Air that surrounds us, to be the most general and common Cause of all Diseases: for the Air, says he, varying from its proper Nature, whilst it is al-

ter'd, corrupted, or defil'd, infects almost all the Animals that breathe within the Circuit of it: But whether there be any other common Causes of Diseases, or the Air alone be to blame, we will examine by and by.

1061. A Traveller, &c.] In these 7. v. the Poet being about to advance a Position, that may seem incredible to such as have had no Experience of it, concerning the diseas'd and noxious Power, that by some Means or other is imparted to the Air, and perceptible to none of the Senses, alledges, by way of Example, the Inconveniences and Harms, that happen to us in an Air, to which we have not been accusom'd, even tho' that Air be not in the least tainted or corrupted: And he confirms, that the Air of one Climate is different from that of another: for, no doubt, the Air, that surrounds Great Britain, says he, is quite different from the Air of Egypt: nor is the Air in Pontus less different from that of Gades and Æthiopia: the Truth of which is daily experienc'd by such as travel into foreign Countreys: And from this difference of Air proceed the different Colours and Complexions of Men. Aristotle too argues to the same purpose in his Treatise, De aëre, aquis, & locis.

1063. Because, &c.] This Reason is not to be controverted; for the

How diff'rent is the AIR of BRITAIN'S Isle,
 1065 From that which plays upon the wand'ring NILE?
 What diff'rent AIR does PONTUS'S Snows embrace,
 From that which fans the Sun-burnt INDIAN'S Face?
 And as MEN'S SHAPE, or COLOUR, disagrees,
 So ev'ry NATION has its own DISEASE:
 1070 The LEPERS are to EGYPT only known,
 Those Wretches drink of NILE'S Streams alone:

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the difference of Air, and change of Water, are often prejudicial to Travellers into foreign Countreys: The banish'd Ovid therefore had just reason to complain, that

*Nec cœlum ferimus, nec aquis
 assuescimus istis.*

1064. How diff'rent, &c.] This, and the three following Verses run thus in the Original:

*Nam quid Britannis cœlum differre putamus,
 Et quod in Ægypto est, quâ mundi claudicat axis?
 Quidve, quod in Ponto est differre à Gadibus, atque
 Usque ad nigra virûm percocta-
 que sæcla calore?*

In which Verses the Poet confirms by Examples, his last Assertion, concerning the difference of Air in different Climates: and instances in the Air of Egypt as oppos'd to that of Great Britain; from whence Egypt is distant the whole Extent of the Mediterranean Sea: Besides, by Egypt, which is a Countrey of Africa, he means the South Part of the World, and by Britain the North: by Pontus, which is a Countrey of Greece, he means the East Part of the World; and by the Gades, which are Islands in the occidental Ocean, where Europe is divided from Africa, he means the West Part of it: for he chose to mention those

four Places, because they were the most noted, that in his Days were believ'd to be the farthest distant from one another: that is to say, two from the North to the South, Britain and Egypt, which is the Distance of Latitude: and two from the East to the West, Pontus and Gades, which is the Distance of Longitude.

1065. Nile] Of this River we have spoken at large in the Note on v. 722. of this Book.

1066. Pontus] Pontus is a Countrey of Asia the less, lying between Bithynia, Paphlagonia, and the Euxine Sea.

1067. From that, &c.] Lucretius means the Air of Mauritania, or Æthiopia, in which Countreys the Natives are black.

1068. And as, &c.] In these 9. v. the Poet produces Instances of certain Countreys, that are obnoxious to certain Diseases, by reason of the very Nature of the Air: Thus, says he, the Leprosie is frequent in Egypt only; the Athenians are subject to the Gout, &c.

1070. The Lepers, &c.] Galen seems to subscribe to this Opinion of Lucretius, who believes, that the Leprosie is a Disease, that infects the Countrey of Egypt only: for in his second Book to Glaucô, chap. 13. he says, That in Alexandria, a City of Egypt, many are afflicted with the Leprosie, by reason of the Food they eat, and of the Heat of the Countrey: But in Germany

Germany and Myfia this Disease is very seldom known; nor has it scarce ever appear'd among the Scythians, who are Drinkers of Milk: Yet it is very frequent at Alexandria, for the Reason above-mention'd; for they feed upon boil'd Meal, and Lentils, and Perwinkles, and eat many things that are dry'd with Salt: nay, some of them eat Asses Flesh, and some other things, that breed a thick and melancholick Humour. And the Air of the Countrey being hot, the Motion of the Humours is driven towards the Skin. Thus Galen. But Celsus, lib. 3. cap. 24. is more in the right as to this Disease: for, tho' he says indeed, that it is almost unknown in Italy, yet he owns it to be very frequent in several other Countreys. In the last Age, the Leprosie was not uncommon in Germany; and A. Pareus, relates, that in Spain, and all over Africa, there are more Lepers than in the rest of the World; and more in Guienne, and the South Parts of France, than in all the other Parts of that Kingdom. If we may believe Pliny, lib. 19. cap. 16. it was altogether unknown in Italy, till the Time of Pompey the Great; when it was first brought thither, but soon cur'd and extinguish'd. Yet History informs us, that it broke out again in that Countrey, in the Days of Constantine the Great, who was himself afflicted with it; till, having refus'd to make use of the impious Bath of human Blood, that was prescrib'd to him as a Remedy for that Disease, he was, in the Lateran Church, bath'd in the Fount of Holy Baptism, by the Roman Pontif Sylvester, and cur'd at once of either Leprosie. Nor is it unlikely, but that the Emperour might have been advis'd to that cruel Immersion in the Blood of Infants, by some Egyptian or other: especially if what Pliny says be true: That when

this Disease, which was peculiar to Egypt, happen'd to sieze any of the Kings of that Countrey, it was fatal to their Subjects: for, to cure it, they were wont to bathe their Thrones in human Blood: *Ægypti peculiare hoc malum, & cum in Reges incidisset, populis funebre: quippe in balneis solia temperabantur humano sanguine ad medicinam eam.* Plin. Nat. Hist. lib. 19. cap. 16. Moses in Exod. chap. 9. v. 10. calls it *Ulcus inflationum germinans in homine*; which Jun. & Tremel. explain, *erumpens multis pustulis*, sprouting out with many Blains, &c. This Disease is one of the Curses with which the Disobedience to God is threaten'd. Deut. chap. 18. v. 27. The Lord shall smite thee with the Botch of Egypt, &c. which likewise confirms what Lucretius here says: and perhaps gave occasion to the Calumny which Trogius Pompeius, Diodorus Siculus, Tacitus, and other Heathens cast upon the Hebrews, that they were expell'd out of Egypt for being scabby and leprous; which mistake was easy: instead of being dismiss'd for having brought those Diseases upon the Egyptians. The Latines call it *Elephantiasis*, because it makes the Surface of the Body rough with black wannish Spots, and dry parch'd Scales and Scurf, like the Skin of an Elephant. It is a contagious Disease, and incurable, if not taken in time: for it spreads over the whole Skin, almost like a Cancer.

Egypt] This Countrey was so call'd from *Ægyptus*, the Brother of Danaus, whom the same *Ægyptus* slew, and reign'd there sixty eight Years. It was call'd before, *Melas*, *Aëria*, *Aëra*, *Ogygia*, *Hephœstia*, *Melamboles*, and by several other Names. The Hebrews call'd it *Misraim* and *Chus*. It is divided by *Mela* into two Parts, *Delta* and *Thebais*: In the Time of *Amasis*

ATHENS, the *MUSES* Seat, and chief Delight,
 Offends the *FEET*, *ACHAIA* hurts the *SIGHT* :
 And thus in ev'ry *LAND* a new *DISEASE*,
 1075 New *PAINS* on all the other Members sieze,
 And diff'rent *AIR* is still the Cause of these.

Thus often when ONE *COUNTREY'S AIR* is blown
 Into ANOTHER, and forsakes its OWN :

It spoils the WHOLESOME *AIR*, where-e'er it goes,
 1080 And, like itself, makes all unfit for us.

Thence *PLAGUES* arise ; and these descend and pass
 Into our *FOUNTAINS*, tender *CORN*, and *GRASS*,
 Or

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it had 2000 Cities, and in the Time of Pliny 3000. It is bound-ed on the East with the Red Sea ; on the West with Cyrene, on the North with the Mediterranean, and on the South with Habassia.

1071. Nilus] Of this River see above, in the Note on v. 722.

1072. Athens] Of this City we have spoken in the Note on the first Verse of this Book.

1073. Offends the Feet] In like manner as the Egyptians, says Lucretius, by reason of the Air of their Countrey, were subject to the Leprosie, so too were the Athenians, for the very same Cause, subject to the Gout.

Achaia hurts the Sight] A part of Peloponnesus was call'd by this Name ; as was likewise the whole Countrey of Greece ; from one Achaus, the Son of Jupiter, or Zuthus, who reign'd there. What Lucretius says of the Countreys being hurtful to the Eyes, we must take his Word for. I know nothing to the contrary.

1074. And thus, &c.] What our Poet says in these 3. v. may be confirm'd by many Examples : The Air of Florence is prejudi-cial to the Brain, but very bene-ficial to the Legs : and the Air of Pisa is diametrically opposite to that of Florence, notwithstand-ing that those two Cities are not at most above forty Miles di-

stant from each other, says Nar-dius. Thus too the Air of Pa-ris, says Fayus, is very dangerous to Wounds in the Head, &c.

1077. Thus often, &c.] In these 4. v. he concludes, that all pestilential Distempers proceed from the Inclemency of the Air ; which, being unhealthful to us, creeps unheeded by us into our Limbs and Bodies, in like man-ner as a Mist, or Smoke ; and where-ever it enters, it disturbs and changes all Things, and cau-ses us all to fall sick. Or, that when that infected Air comes in-to our Country, it corrupts the whole Air of it ; from whence arises a regional Distemper, which spreads itself thro' many Places.

1081. Thence Plagues, &c.] In these 12. v. the Poet, lest those Seeds of Pestilence should be thought to be grown weary with the length of their Journey, and to remain pendulous in the lazy Air, assigns them fixt and certain Stations, where they fall and settle : For, says he, some of them fall into the Waters, others on the Fruits of the Earth, and the several sorts of the Foods of Animals : And this is the Rea-son, why a Plague sometimes e-qually siezes both Men and Cat-tle. Thus he acknowledges the Air to be the sole Cause of Plagues.

Whether

Whether PLAGUES are promiscuous and common to all Sorts of ANIMALS.



OUR Authours of best Credit testify, that Murraings, which are Plagues in Cattel, precede, accompany, or follow, any pestilential Mortality in Men. They precede, when noxious and sickly Vapours exhale from the Earth; which Vapours the Cattel, as they feed, receive first into their Bodies, and are seiz'd with a deadly Disease. A Mortality of this Nature was observ'd to happen in the Kingdom of Naples, in the Year 1617. when, after excessive Rains, that had continu'd for many Days together, without almost any intermission, and had laid under Water all the Plains of the Countrey, the Cattel eat the Grass, as it sprung up out of the Ground, while it was yet slimy, and full of Mud: this caus'd a putrilaginous Disease in their Jaws and Throats, which soon suffocated and kill'd them: And Necessity compelling the Neapolitans to slaughter some of these infected Cattel for the Butchery, whoever eat of the Flesh of them, were seiz'd with the same Disease, which by this Means spread itself in a short time over the whole Kingdom, and swept away a vast Number of the Inhabitants. Pliny too mentions a like Pestilence, which fell on Beasts one Year, and on Men the next; *quæ priore anno in boves ingruerat, eo verterat in homines*, says he, *Nat. Hist. lib. 41. cap. 9.* And Silius Italicus, speaking of a Plague, says,

*Vim primam sensere canes; mox nubibus atris
Fluxit deficiens, penna labente, volucris;
Inde feræ sylvis sterni* —————

And Ovid to the same purpose sings;

*Strage canum primò, volucrumq; aviumq; boumq;
Inque feris subiti deprensa potentia morbi est.*

To which I add the following Verses of Dryden, describing the Plague at Thebes, in his Tragedy of OEdipus :

———— The raw Damps

With flaggy Wings fly heavily about,
Scatt'ring their pestilential Colds and Rheums
Thro' all the lazy Air : Hence Murrains follow
On bleating Flocks, and on the lowing Herds :
At last the Malady————

Grew more domestick ; and the faithful Dog
Dy'd at his Master's Feet ; and next, his Master :
For all those Plagues, which Earth and Air had brooded,
First on inferiour Creatures try'd their Force,
And last they siez'd on Man.————

Besides ; as the Murrain in brute Beasts often precedes the Plague in Man ; so too, as most Authours have rightly observ'd, it no less frequently accompanies it ; and the rational and irrational Animals mutually impart the Infection to one another : Thus Thucydides, speaking of the Plague of Athens, which our Poet is going to describe, says ; That the Birds and Beasts, that use to feed on human Flesh, tho' many Bodies lay above Ground unbury'd, either avoided to come at them, or, if they tasted, perish'd : Τα ὅδ' ὄρνεα, καὶ τελεόποδα, ὅσα ἀνθρώπων ἀπλεῖ, πομπῶν ἀτάφων γιγνομένων, ἢ ἐπεσύνει, ἢ γευσάμενα διεφθείρετο. Thucyd. To which he adds, That by the Dogs this Effect was seen much clearer, because they are familiar with Men : οἱ δὲ κύνες, says he, μάλλον αἰσθίσιν παρείχον τῷ ἐπιβοάνοντι, διὰ τὸ συνδιατᾶν. Boccace, in the Proemium to his Decameron, speaking of the violent Plague that rag'd in Italy, in the Year 1348. says expressly, and of his own Knowledge, that the Nature of the Pestilence was such, that it imparted its Contagion not only from Man to Man ; but that if the Cloaths of a Person infected with that Disease, or dead of it, were touch'd by any Animal of another Species, it not only infected that Animal with the same Distemper, but kill'd him in a very short time. Then he adds, what he had been an Eye-witness of ; That the tatter'd Cloths of a poor Man, who dy'd of that Pestilence, being thrown into the High-Way, two Hogs came up to them, and after they had, as their Custom is, tumbled them about with their Snouts, taken them in their Teeth, and shaken them about their Cheeks, they in a very little time, after several times turning round, both dropt down dead upon

on them, as if they had eaten Poison. Dico, says he, che di tanta efficacia fù la qualità della pestilentia narrata, nello appiccarfi da uno all' altro, che non solamente l' huomo à l' huomo, ma questo, che è molto più, assai volte visibilmente fece, cioè, che la cosa dell' huomo infermo stato, ò morto di tale infermità, tocca da un' altro animale fuori della spetie dell' huomo, non solamente della infermità il contaminasse, ma quello infra brevissimo spatio uccidesse, di che gli occhi miei, si come poco davanti è detto, presero tra l' altre volte un' di così fatta esperienza, che essendo gli stracci d' un povero huomo, da tale infermità morto, gittati nella via publica, & abbattendosi ad essi due porci, è quegli secondo il lor costume prima molto col grifo, & poi coi denti prefigli, & scossigli alle guancie, in piccola hora appresso, dopo alcuno avvolgimento, come se veleno haveffer preso, amenduni sopra gli mal tirati stracci, morti caddero in terra. Hippocrates nevertheless will not allow contagious Diseases to be promiscuous and common to all sorts of Animals; for he, in his Treatise de Flatibus, having ask'd this Question, Why infectious Distempers sieze not all Animals alike, but only some one Species of them? immediately answers; That one Body differs from another Body, one Nature from another Nature, and one Nutriment from another Nutriment: Nor are the same things alike beneficial or hurtful to all the several Species of Animals; but some things agree with some Animals, better than they do with others: Therefore, when the Air is fill'd with such Filth and Pollutions, as are noxious to human Nature, Men only fall sick: but when it is hurtful and offensive to any one of the other Species of Animals, then the Disease siezes that Species only. Thus Hippocrates; and indeed the Proposition he advances is true, whenever a Disease siezes one Sort of Animals only, and leaves all the other safe and unhurt: But when several Sorts of them labour under one common Disease; that Disease must have proceeded from the like Causes; and therefore their Natures in some Respects may be said to be alike also: And hence it is, that contagious Diseases in brute Animals sometimes precede, sometimes march hand in hand with and sometimes follow, pestilential Distempers in the human Kind. Lucretius therefore is in the right to say, that Plagues are promiscuous and common

Hominum generi, pecudumque catervis.

Whether

Whether the AIR be the sole Cause of PLAGUES.



LUCRETIIUS, as we have already seen, is of Opinion, that all infectious and pestilential Diseases and Plagues owe their Origine to the Inquinations and Corruptions of the Air: But, before him, Hippocrates himself had advanc'd the same Doctrine: for, in his Book de Flatibus, after a long Narration of the Effects that the Air produces, as well in the great World, as in the lesser, the Body of Man, he at length falls on the Subject of Diseases, all which he affirms to be bred and generated in the Bodies of Animals by Means of the Air: First, says he, I will begin with the most common fevorous Disease, which accompanies in some Measure all Diseases whatever. For there are two sorts of Fevers: one, that is promiscuous and common to all, and is call'd the Plague: the other, by reason of unhealthful Diet, is peculiar only to such as use that Diet: but of both these Kinds of Fevers, the Air is the sole Authour and Cause: For the common Fever, or Plague, therefore happens to all, because they all breathe the same Air: and 'tis certain, that the like Air, being alike mingled in like Bodies, must beget the like Fevers. Thus the great Hippocrates, whose Authority nevertheless is not of such Validity, as to command our Assent to this Primacy of the Air in all manner of pestilential Diseases: for, let us grant, that a pestilent Fever may be caus'd by the Air; will it follow from thence, that every pestilent Fever is so? and that they all proceed from the Air only? In the first place, the Logicians allow, that an indefinite Proposition, when the Consequent is not of Necessity, is not of the same Force with an universal: therefore, tho' we will admit, that a common Fever is sometimes caus'd by the Air, there is not any Necessity, from the Testimony alledg'd, but that we may substitute other Causes of a pestilent Fever, and even of the Plague itself. Galen, in his Treatise de diff. Febr. observes, that pestilential Fevers proceed sometimes from a great abundance of Humours, when-
ever

ever those Humours have acquir'd, from the ambient Air, the least tendency to Corruption. And the same Authour, speaking of the above-cited Opinion of Hippocrates, says: He was mistaken in ascribing the Cause of epidemical Diseases to the Air only: For, when a Famine raged in Aenus in Thrace, all that fed upon Roots, lost the use of their Legs; and such as eat Vetches, were seiz'd with violent Pains in their Knees. I have known too, continues he, that when, in a Famine, People have been forc'd to eat Corn that was half-rotten, they have fallen into a common Disease, from that common Cause: and sometimes too, when a whole Army had been compell'd to drink corrupted Water, all the Soldiers have been alike afflicted with a like Disease. Thus Galen, who liv'd himself at Rome, when, in the Reign of Marcus Antoninus, a raging Plague, that was occasion'd by a Famine, desolated that City, and swept away Multitudes of the Roman Citizens. This therefore may suffice to invalidate the Prerogative, which Hippocrates acknowledges to be due to the Air, of its being the only Promoter of Plagues: since it is evident, that unwholesome Food, and vitiated Waters, have no small share in causing Epidemical Diseases. Let us now inquire, what, how much, and how, the Air contributes to the communicating, or promoting of a Plague.

Tho' the Air be not the sole Cause of a Plague, yet it cannot be deny'd, but that it is very instrumental, as well in continuing its Duration, as in bringing it into a Countrey: But an universal Plague, generally speaking, can owe its Origine to nothing but Contagion: For it must of necessity be first introduc'd, either by Contact, or what foment and cherishes the Infection. Nor is it in the least repugnant to this, that a particular Plague is caus'd by the ambient Air; provided it be granted, that such an infectious Air comes from a near, not from a far distant, Countrey: the want of reflecting on which Distinction has, perhaps, been the Cause of the Mistake, and Variance of Opinions: For that tainted Air, being agitated by the Winds, blended with the immense Mass of pure Air, and coming from a great Distance, can not retain its antient Pravity; but the Inquinations, it had contracted, must be intirely broken, dispers'd, and dissolv'd; which nevertheless it can not wholly lose in a short time, and coming from a moderate Distance. This is demonstrated by the Example of strong Odours, which strike the Sense, if they come from a near Place, but not when they come from one that is far distant: for those Vapours,
being

being agitated for any length of Time, will be lost and destroyed; and their most tenuous Substance will, according to the Custom and Nature of Mixtures, convert and resolve into its proper Element. And therefore the Air succeeds, but not precedes, a Contagion; and may propagate a Plague peculiarly, and by degrees; but not bring it universally, and all at once, into a healthful and uninfected Countrey: In a Word, the Sum of all is, that the Air does not begin, but propagates the Contagion, that is already begun; especially when it is tainted with the Pollutions, that proceed from the Corruption of infected Bodies.

Or other Food, or hang within the Air,
Held up by FATAL WINGS, and threaten there:
1085 So, while we think we live, and draw our Breath,
Those PARTS must enter in, and foll'wing DEATH.
Thus PLAGUES do often sieze the lab'ring Ox,
And raging ROTS destroy our tender FLOCKS:
And thus the Thing's the same, if WINDS do bear
1090 From other COUNTREYS an unusual AIR,
And fit to raise a PLAGUE, and Fever HERE:
Or if we TRAVEL all, and suck it THERE.
A PLAGUE, thus rais'd, laid learned ATHENS waste;
Thro' ev'ry Street, thro' all the Town it pass'd,
Blasting

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1089. And thus, &c.] In this and the three following Verses, the Poet says, that we incur a like Danger, when we travel into a Countrey, whose Air is unhealthy, or disagrees with our Constitution, as we do, when Nature introduces into our Bodies a tainted and corrupted Air, or any other new Thing, to which we have not been accusom'd, and that is hurtful to us.

1093. A Plague, &c.] Hitherto he has been treating of the Corruption of the Air, or the Cause of a Plague: which is a Disease that gains ground in such a manner, that, arising for the most part from small Beginnings, it increases by Degrees, and spreads itself far and wide. Now

from this Verse to the End of the Book, the Poet gives us a Description of that memorable Plague, which broke out in Attica, in the first Year of the Peloponnesian War; and laid waste that whole Countrey, as well as the City of Athens, the Metropolis of it. Thucydides, who was himself both a Spectator and Sharer of it, has describ'd it no less accurately than elegantly, in the second Book of his History: Hippocrates too, who was likewise an Eye-witness of it, not only, as a private Man, lent his Assistance, and, for the publick Good, extinguish'd and put to flight that raging Pestilence, for which Reason he obtain'd divine Honours of the Athenians; but

1095 Blasting both MAN and BEAST with pois'nous Wind :
DEATH fled before, and RUIN stalk'd behind.

From EGYPT'S burning Sands the FEVER came,
More hot than those that rais'd the deadly FLAME :

The WIND, that bore the FATE, went slowly on,
1100 And, as it went, was heard to sigh, and groan.

At

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but has also left a lively Relation of it in his third Book de Morb. Popul. Our Lucretius embrac'd the same Argument, and, in the following Description of that Plague, has copy'd after those two Authours, but more particularly after Thucydides, whom he has imitated so happily, that Macrobius Saturnal. lib. 6. cap. 2. says, that Virgil has borrow'd from him in his second Georgick, as Ovid most visibly has in his 7th Metamorph. Now in these 12. v. Lucretius teaches, that the Plague of Athens, which he is now beginning to describe, proceeded from the same Causes, he has mention'd already: but Plagues generally come from foreign Countries, and therefore he says this came from Egypt to Athens; yet according to Thucydides, it came from a remoter Distance; for he brings it from Æthiopia, which is beyond Egypt.

Laid learned Athens waste]
Lucretius says,

Finibu' Cecropiis funestos reddi-
dit agros.

For Athens was first call'd Cecropia, from Cecrops, who built it, and was the first King, and Legislatour of the People of Attica, whom, says Suidas, he assembled together, and divided them into twelve Tribes; but before his Days they liv'd scatter'd up and down in Villages.

1095. Pois'nous Wind:] This Lucretius calls morbifer æstus: but what he means by it is uncertain: tho' he seems to intend

that deadly Heat and Strength of the Disease, which, like a raging Fire, consum'd and destroy'd all it seiz'd on. Therefore by the Word Æstus may be understood, either the Heat of the Plague; since a Plague is either a Fever, or never without a Fever: or else we may understand the great Abundance of the infectious Air; since the Poet has above imputed the Cause of the Plague to the very Corruption of the Air; and this seems to have been the Opinion of our Translatour: or lastly, and rather than any of the other two Explications, we may interpret it to mean the vehement Heat of the Air; since Æthiopia and Egypt, from whence the Plague came to Athens, are Countreys excessively hot.

1097. From Egypt's, &c.] Thus too Thucydides; Ἡρξάτο δὲ τὸ μὲν πρῶτον, ὡς λέγει, ἐκ Ἀιθιοπίας τ' ὑπὸ Ἀιγύπτῃ, ἐπειὶ καὶ ἐς Ἀιγύπτον καὶ Λιβύην κατέβη, καὶ ἐς τὴν Βασιλέως γλῶσσαν πομπήν· ἐς δὲ τὴν Ἀθηναίων πόλιν ἔξαπινάως ἐνέπεσε. It began, by report, first in that part of Æthiopia, that borders upon Egypt, and then fell down into Egypt and Libya; and into the greatest part of the Territories of the King: It invaded Athens on a suddain.

1099. The Wind, &c.] Lucretius has given no Occasion for this and the following Verse; which are borrow'd from the Bishop of Rochester's Plague of Athens, where in Stanza 4. we read,

At last, the raging PLAGUE did *ATHENS* sieze,
The PLAGUE; and DEATH attending the Disease.
Then MEN did die by HEAPS, by Heaps did fall,
And the WHOLE CITY made ONE FUNERAL.

First,

N O T E S.

The loaded Wind went slowly
on,
And, as it pass'd, was heard to
sigh and groan.

1101. At last, &c.] Hitherto the Poet has been treating of the Causes of Plagues in general; and particularly of that of Athens, which he is about to describe: Now the Learned in Physick tell us, that an infectious Disease may be caught three several Ways: the first they call, *per distantiam*, by which they mean, when the tainted or corrupted Air is breath'd and swallow'd by such as are at some distance from the Persons infected: the second, *per contactum*, that is, when we are near, and touch those that are visited with the Plague. Hence, as Ovid says,

—Inque ipsos sæva medentes
Erumpit clades; obsuntque auctioribus artes.

To which he adds soon after;

Quò propior quisque est, servitque fidelius ægrum,
In partem lethi citius venit.—

The third they call, *per fomitem*, by which they would have us understand, when the vitiated, infectious Air is a long time preserv'd in Cloaths, Wool, &c.

1103. Then, &c.] To the same Purpose Dryden, describing the Desolation and Havock of a Plague, says finely:

And then a thousand Deaths at once advanc'd,
And ev'ry Dart took Place: all was so suddain,

That scarce a first Man fell: one but began

To wonder, and strait fell a Wonder too:

A third, who stoop'd to raise his dying Friend,

Drop'd in the pious Act. Heard you that Groan?

A Troop of Ghosts took Flight together there:

Now Death's grown riotous, and will play no more

For single Stakes, but Families and Tribes:

With dead and dying Men our Streets lie cover'd;

And Earth exposes Bodies on the Pavements,

More than she hides in Graves.—

Between the Bride and Bridegroom have I seen

The nuptial Torch do common Offices

Of Marriage, and of Death. Cast round your Eyes,

Where late the Streets were so thick sown with Men,

Like Cadmus Brood, they jostled for their Passage,

Now look for those erected Heads, and see them,

Like Pebbles, paving all our publick Ways.

Tragedy of OEdipus.

Die by Heaps,] For it is the Nature and Property of a Plague, grown adult, and in the Height of its raging, that many Persons should be visited by it at once, and many die of it: But it has been disputed by Physicians, whether it can be call'd a Plague at its first breaking out, and while only one or two are sick of it: which some positively affirm, but others as strenuously deny. It can

1105 First, fierce unusual HEATS did sieze the HEAD ;
 The glowing EYES, with blood-shor Beams, look'd red,
 Like BLAZING STARS, approaching FATE foreshew'd ;
 The MOUTH and JAWS were fill'd with clotted BLOOD ;
 The

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can not indeed be controverted, but that there are Definitions of Things grown to Perfection : Thus Mankind, while yet in their Infancy, can scarcely be said to be indu'd with Reason. In like manner a Plague, just breaking out, is not indeed common, but will be so, unless it be timely prevented : However, it is truly a Plague, tho' but ten Persons are sick of it, nay, if but one.

1105. First, &c.] Here the Poet, in 18. v. enumerates the several and chief Symptoms and Tokens, that were observ'd in those that were visited with this Plague of Athens. I. An extream Heat in their Head. II. An Inflammation of the Eyes. III. Ulcers in the Throat, and an Emission of Blood from thence. IV. A roughness of the Tongue, and such a heaviness, that they cou'd scarce move it ; together with Ulcers ; and putrid Blood flowing from thence likewise. V. A noisome stinking Breath. VI. Fainting Fits, or Swoonings. VII. Dejection of the Mind. VIII. Groans and Complaining. IX. Frequent, convulsive Yexings, or Hickers.

Fierce Heats, &c.] Thus too Thucydides : Πρῶτον μὲν τὸ κεφαλῆς θερμαίει χυρὰ, καὶ τῶν ὀφθαλμῶν ἐρυθρίματα, καὶ φλόγας ἐλάμβανε. They were first taken with an extream Heat in their Heads, and with a Redness and Inflammation of the Eyes. Thus says that Historian, upon whom the Bishop of Rochester has paraphras'd as follows,

Upon the Head, first, the Disease,
 As a bold Conquerour, does sieze,
 Begins with Man's Metropolis ;
 Secur'd the Capitol, and then, it knew,
 It cou'd at Pleasure weaker Parts subdue :
 Blood started thro' each Eye ;
 The Redness of that Sky
 Foretold a Tempest nigh.

1107. Like blazing Stars, &c.] This Verse our Translatour has added to his Authour.

1108. The Mouth, &c.] In like manner Thucydides, Καὶ τὰ ἐντὸς, ἥτε φάρυγξ, καὶ ἡ γλῶσσα θυβὺς αἱμαλώδι ἦν. i. e. And inwardly their Throats and Tongues grew presently Bloody. This third is indeed a dreadful Symptom, and an infallible Mark, that the OEconomy of the whole Body was vitiated. Mattheus Villanus relates, that in the Plague, which rag'd in Italy, in the Year 1348. they were afflicted almost in the same manner : and that when they were siez'd with the Disease, they either dy'd suddenly, or the next Day, or liv'd but to the third at farthest. This too is confirm'd by Guido Cauliacus, lib. 2. cap. 5, the Pope's Chirurgeon, and an Eye-witness of it ; who besides voluntarily deposes, that the Mortality was so great in all the Places infected, that scarce a fourth part of the Inhabitants were left alive.

The THROAT with ULCERS: the TONGUE could speak
no more,

1110 But, overflow'd, and drown'd in putrid Gore,
Grew useless, rough, and scarce could make a Moan,
Nay, scarce enjoy'd the wretched Pow'r to groan.

Next thro' the JAWS, the PLAGUE did reach the
BREAST,

And

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Were fill'd with clotted Blood] Lucretius says,

Sudabant etiam fauces intrinsecus atro
Sanguine. —

i. e. And, inwardly, their Jaws and Throats sweated out black Blood: where the Word, Sudabant, they sweated, is not spoken figuratively, but properly: for the Blood was forc'd out per diapedesim, i. e. by Transcolation, or Exudation: for so they generally interpret that Word. Now this sweating, or oozing out, of Blood, was occasion'd by the weakness and decay of the retentive Power, that resides in the small Veins: besides, the whole Mass of Blood being enormously vitiated, it stimulated and urg'd Nature to that Excretion.

1109. The Tongue cou'd speak no more,] This fourth Symptom of the Athenian Plague, of which Thucydides is silent, Lucretius has taken from Hippocrates, de Morb. popul. lib. 3. capp. 3. 10. 11. where that Authour represents it to be no less fatal than the former, and says, it proceeded from the same Cause.

1111. Grew useless] Lucretius says, motu gravis, heavy in Motion: Galen, in Com. 1. takes Notice of this Symptom, and says, it was caus'd by the Imbecillity of the animal Faculty, and the exorbitant Plenty of the Humours, that the Tongue had imbib'd.

Rough] Tho' the Tongue,

says Galen, in the Place above-cited, had imbib'd a great abundance of Humour; yet that Humour being exceeding hot, hinder'd not the Tongue from being rough and scurfy; as it constantly was, by reason of the too much Heat, that exhal'd from the Præcordia.

Scarce could make a Moan,] This Thought our Translatour has added to Lucretius, and taken it from the B. of R. who, in his Plague of Athens, Stanza 11. says,

The Tongue did flow all o'er
With clotted Filth and Gore;
As does a Lion's, when some
inn'cent Prey

He has devour'd, and brought
away.

Hoarseness and Sores the Throat
did fill,

And stopt the Passages of Speech
and Life:

No Room was left for Groans
or Grief:

Too cruel and imperious Ill,
Which, not content to kill,
With tyrannous and deadly
Pain,

Dost take from Men the very
Power to complain!

1113. Next, &c.] What Lucretius represents in these 7. v. Thucydides relates as follows; Καὶ ἐν τῷ πολλῷ χρόνῳ κατέβαινον εἰς τὰ στήθη ὁ πόνος μὲν βίχου ἰχυρῆ, καὶ ὁπότε εἰς τὴν καρδίαν συνελάμεν, ἀνέσχετό τ' αὐτῶν, ἢ ἀποκατάστασις χολῆς παύσαι, ὅσα, ἰατρῶν

And there, the HEART, the Seat of Life, possess'd :
 1115 Then LIFE began to fail : strange STINKS did come
 From ev'ry putrid BREAST, as from a TOMB :
 A sad Prefage, that DEATH prepar'd the Room.

The

N O T E S.

ὑπὸ ἰατρῶν ὀνομασμέναι εἰσιν,
 ἐπῆσαν ἢ αὐτοὶ μὲν ταλαιπωρίας
 μεγάλης· that is to say; Not
 long after, the Pain, together
 with a mighty Cough, came
 down into the Breast : and, when
 it was once settled in the Sto-
 mach, it caus'd Vomit ; and all
 manner of bilious Purgation, that
 Physicians ever nam'd, came up
 with great Torment. Lucretius
 takes no Notice, neither of the
 vehement Coughing, which no
 doubt proceeded from a Con-
 vulsion of the trachea, or Wind-
 pipe; nor of the other Symp-
 toms of Sneezing and Hoarseness,
 which are likewise mention'd by
 Thucydides. Ἐπειτα, says he,
 ἔξ αὐτῶν πλάσμα ἢ βράγχῃ
 ἐπεγίγνετο.

1114. The Heart,] He means,
 the Stomach: For here our
 Translatour has literally fol-
 low'd his Authour, who makes
 use in this Place of the Word
 Cor, which sometimes signifies
 the Stomach; as the καρδία of
 the Greeks, which signifies like-
 wise both cor and stomachus.
 Thus the Scholiast, on the fore-
 going Passage of Thucydides,
 says: Οἱ παλαιοὶ ἰατροὶ τὴν σό-
 μαχον καρδίαν ἐκάλεον, ἢ καρδίαν-
 μον τὴν σόμαχον. i. e.
 The antient Physicians call'd the
 Stomach the Heart, and a Pain
 in the Stomach a Pain in the
 Heart.

1115. Strange Stinks, &c.]
 When the Disease was got down
 into the Stomach, there follow'd a
 stinkingness of Breath, says Lucre-
 tius, like the Stench that exhales
 from dead Bodies : Thus too the
 B. of R.

Then down it went into the
 Breast ;

There all the Seats and Shops of
 Life possess'd :

Such noisome Smells from
 thence did come,

As if the Body were a Tomb.

Now these offensive Smells must
 have proceeded, either from the
 Putrefaction of the Humours, or
 of the Lungs ; or rather of both :
 which seems more consonant to
 Reason, as well as to the Opi-
 nion of Hippocrates, who, Epi-
 dem. 3. 5. 3. relating the
 Symptoms of this Plague, makes
 mention of many putrify'd
 Parts : Nor can it be doubted,
 but that the infected Athenians
 were then troubled with a Peri-
 pneumony, by reason of the great
 Defluxion of vitiated Blood, that
 fell upon the Lungs. Now a
 stinking Breath is held to be an
 ill Symptom in all Diseases, but
 worst in Epidemical : For, if
 what Galen, 3. de Præ sag. ex
 Pulsib. cap. 4. observes, be true,
 that whatever is vitiated, does
 not putrify, but that noisome
 Smells are a certain Mark of Pu-
 trefaction ; a Rottenness of Hu-
 mours, or of Parts, must have
 been added, by way of Over-
 measure, to this fatal Corrup-
 tion. It has been observ'd, that
 many, who, when they were in
 Health, had stinking Breaths,
 have dy'd a suddain Death : the
 Reason of which was, because
 the whole Substance of their
 Lungs was by degrees putrify'd :
 but, what a long Catarrh can
 perform in the Course of a Man's
 Life, a Plague may accomplish
 all at once, by reason of its greater

The Body weak, the MIND did sadly wait,
And fear'd, but could not flie, approaching FATE:

To

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ter Efficacy: and therefore a stinking Breath is certainly a dangerous Symptom in pestilential Diseases.

1118. The Mind, &c.] What

Lucretius here says of the general Dread, that had seiz'd the Athenians, affords us an Opportunity to make the following Inquiry.

Whether FEAR promotes and propagates a PLAGUE.



CONSTERNATION and Dejection of Mind are never beneficial, not even in Health; but they are prejudicial in all Diseases, and worst of all in a Plague: Hence Lucretius more than once makes mention of it; and gives us a Handle to inquire, I. Why is it so? And, IIly, Whether what some have asserted be true; viz. That the Plague is caught by bare Imagination only? To begin with the Last: They, who hold the Affirmative, are not content it should be granted them, that, by the strong Apprehension of the Patient, an infectious Disease may be brought upon him: But they insist likewise, that it may be imparted to him by Witches, or other ill-minded Persons: these Opinions spring from this Belief; that our Fanny can affect, and work upon, not only our own Body, but those likewise of others. These Things might pass for idle Tales, were it not, that, under the Mask and Disguise of Imagination, were conceal'd the Arts of the sworn Enemy of Mankind, by whose Persuasion and Assistance, Plagues and Sorceries are sometimes propagated in the World: I doubt not of the ill, malicious habit of Mind, which his Votaries may have contracted; but that alone, without his more powerful Aid, to whom, for the horrid Sins of Mankind, is permitted a Power to do Hurt, is unable to affect others.

The other Opinion, which imputes the Infection of a Plague to the strong Apprehension of the Patient, seems, at first sight, to carry with it a greater Semblance of Truth: For no Man ever controverted the Strength of Imagination, in

in regard to its Operations on a Man's own Body: thus we shudder, and our very Blood cruddles within us, on the bare Remembrance of any horrible Action: we rejoice, even when the Object of our Joy is absent: we grow angry, tho' no Man provokes us: let us but fancy our selves applauded, we exult for Joy: and Nardius relates, that he knew a fanfiful silly Woman, who soon experimented in her own Body the Diseases, under which, she had heard, her Acquaintance or Relations were labouring. Such Things have certainly a relish of Hypocrisy or Madness: For what the Sticklers for the Strength of Fantasy foolishly alledge, of I know not what intentional Form, as they term it, that is able to introduce itself into any Matter, that is prepar'd and made ready to receive it, are meer Trifles, and fictitious Day-dreams of superstitious Men: For no Man, in his Senses, ever threatens, or heartily wishes, ill to himself: nor does he wilfully and industriously endeavour to increase a pestilential Disease; but he hates, abhors, and FEARS it; which last is, perhaps, the truest Cause of the Propagation and Continuance of a Plague.

Fear and Sorrow are powerful Agents, and produce wonderful Effects in the Minds of Men: For, as Galen observes, a violent Fear kills immediately; and one that is less Vehement, but of long Duration, is no less fatal. Fear dejects the Mind, and diminishes the Strength: even at the first assault it overwhelms the Spirit, and contracts the Blood, causing a Refrigeration and Chilness of the exterior Parts of the Body: For these Reasons, in such as are seiz'd with Fear, the Pulse, as well of the Arteries as of the Heart, is very small, and extreamly weak. Vide Galenum, 12. Meth. cap. 5. 5. de loc. Off. cap. 1. 4. de Ca. Puls. cap. 5. 2. de Symp. Cas. cap. 2. de Tre. Rig. cap. 2. 2. de Symp. ca. cap. 5. And the same Authour, in his Treatise de Pul. ad Tyr. and in his fourth de Cas. Pul. cap. 4. accurately distinguishes the Difference of Pulses, according to the Nature and Quality of Fear: In a suddain and violent Fear, he believes the Pulse to be quick, quivering, disorder'd, and unequal: in a Fear of long Continuance, he holds the Pulse to be little, languid, slow, and rare: This last sort of Pulse he ascribes likewise to the Effect of Sorrow, between which, says he, and a Fear of long Duration there is no Difference: for in both of them the Strength is impair'd; and that failing, the Pulses can not be unlike: because, according to the same Authour, in those whose Strength is infirm,
and,

and, by reason of their Ignorance, the Affections and Passions of the Mind, forceful and strong, the Essence of the Soul may easily be dissolv'd. Now that by the Word Soul, he means the Life itself, is manifest from what he says, 12. Meth. cap. 5. that the Essence of the Life of Man is corrupted by the Affections of the Mind; and that all great Fears, tho' they do not kill outright, yet they certainly render the Spirit infirm, and easy to be dissolv'd: but Sorrow and Anxiety are hurtful, because they impair the Strength. And to these Opinions of Galen, Lucretius himself subscribes in these Verses:

Verùm ubi vehementi magis est commota metu mens,
Consentire animam totam per membra videmus:
Sudoremque ita, palloremque existere toto
Corpore, & infringi linguam, vocemque oboriri,
Caligare oculos, sonere aureis, succidere artus:
Denique concidere ex animi terrore videmus
Sæpe homines. ————— lib. 3. v. 153.

The Interpretation of which the Reader may find above, Book III. v. 150.

These then are the Effects, that Fear and Imagination produce in the Body, they sieze on: and if an infectious, pestilential Air meet with a Body, thus ill-dispos'd already, that Body will soon imbibe the Contagion, and fall sick of the Disease, being unable to struggle against it, by reason of the Weakness it has already contracted. Rightly therefore has Thucydides, taking Notice of the two greatest Miseries of the Athenian Plague, the *ἄθυμία*, or Consternation of Mind, and the inevitableness of the Contagion, given the Preference to the Consternation of Mind, and assign'd it as one of the chief Causes of the Mortality that rag'd among them.

Δεινότατον, says he, ἦ πάντος ἦν τῆ κακῆ ἢ τὴ ἀθυμία, ὁπότε τις αἰσθοίτο καμνῶν, πρὸς δὲ τὸ ἀνέλπιστον εὐθύς τραπόμενοι τῇ γνώμῃ, πομπῇ μᾶλλον πρὸς ἐνθουσιασμόν αὐτὰς ἢ ἐκ ἀντήχον. i. e. But the greatest Misery of all was, the Dejection of Mind in such as found themselves beginning to be sick: for they grew presently desperate, and gave themselves over, without making any Resistance. And in the last Age, during the Siege of Breda, it was observ'd, that the Plague, which then rag'd, either abated or increas'd, as the Minds of the Soldiers were either rais'd with Hope, or depress'd with Fear: So great are the Effects of Consternation of Mind!

1120 To these fierce PAINS were join'd continual CARE,
And sad COMPLAININGS, GROANS, and deep DESPAIR,
Tormenting, vexing SOBS, and deadly SIGHs,
Which rais'd CONVULSIONS, broke the vital TIES
Of MIND and LIMBS, and so the Patient dies.

Yet

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1120. To these, &c.] These so many, and so intolerable Ills of the Body were attended, says the Poet, with a perpetual Anguish of Mind, which occasion'd unmanly Groans and Complains: Plutarch, relates of Pericles, that tho', with unweeping Eyes, he had beheld the Funerals of so many of his Friends and Relations, yet the Death of his only surviving Son extorted from him some unwilling Tears: and that the Plague, that malignant Inmate, had by little and little corrupted the Body of that magnanimous Man, and overcome his Fortitude, and Strength of Mind: For, while he was languishing under that Disease, he shew'd a Friend, that came to visit him, some Charms and Incantments, that hung about his Neck, and Women had ty'd upon him: which evidently prove the Disorder of his Mind, that could be prevail'd on, to condescend to such Superstition. Thus, says Plutarch, in his Life.

1122. Vexing Sobs, and deadly Sighs,] Lucretius says, Singultus frequens, a frequent Hicket: And for the better Understanding of this ninth Symptom, it will be necessary to recite the Words of Thucydides, relating to it, and that are as follows: *Λύγξ ἔ τ τοῖς πλείοσιν ἐνέπιπλε κενή, σπασμὸν ἐνδιδῶσα ἰσχυρὴν, τοῖς μὲν μελατάντα λωφίσαντα τοῖς δὲ καὶ πομπῇ ὕσασθαι* that is to say: Most of them had likewise an empty Hicket, which brought with it a strong Convulsion, and in some it ceas'd

quickly; but in others was long before it gave over. Now, according to the common Opinion of Physicians, the Hicket is a Convulsion of the Stomach: but Galen, weighing the Matter more narrowly, and considering, that the Muscles only are convuls'd; and that neither the Ventricle, nor the Mouth of it, are either Muscles, or perform the Function of Muscles, says, in his third Book, de Sympt. Caus. cap. 4. that the Hicket is only a deprav'd Motion of the Mouth of the Ventricle, that endeavours to expel what is offensive and troublesome to it; which could not be wanting in our Case: for, the pestilent Defluxion falling down thro' the Throat, and a great Quantity of bileous Matter regurgitating from the Liver, into the Stomach, were certainly offensive to it, and sufficient to cause the Hicket, which was of longer or shorter Continuance, according to the greater or less Quantity and Protrivity of the offending Matter. But to whom are we to give credit; to Lucretius, who calls it, frequens singultus; a frequent Hicket; or to Thucydides, who calls it, *λύγξ κενή*, an empty Hicket? Lambinus, overcome, perhaps, by the difficulty of the Matter, as it often happens to such as meddle with the Affairs of others, very boldly corrects the Historian, and gives more credit to a Poet, that liv'd long after, than to an Eye-witness that writes what he saw. The learned F. Paulinus comes nearer to the Point, and believes, that the Hicket is said to be

1125 Yet touch the LIMBS, the Warmth appear'd not great,
It seem'd but little more than nat'ral Heat ;

The

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empty from the Cause that produces it, that is to say, Exinanition : for both Hippocrates and Galen allow, that there are two Causes of Convulsion ; the Repletion, and the Exinanition, or Emptiness, of the Nerves : and the last of those Authours admonishes, that a Convulsion, proceeding from the Exinanition of the Nerves is the worst Symptom in a Hicket : but in this Case of the Plague of Athens, there can not be the least Ground to suspect any Emptiness ; since, as we said before, there was a copious and continual Defluxion of Humours : Besides, it is notorious, that there are other Causes of Convulsions, than those before-mention'd ; and from which it is more probable, that the violent and laborious Hicket proceeded : for why might not they, who were visited with a Plague, have a frequent and empty or fruitless Hicket ? The first was a Token of the Pertinacy of the molesting Cause ; the other, of the ineffectual Fatigation : For, as Galen, 3. de Sympt. Caus. cap. 1. witnesses ; In Vomits, those things are thrown up, that are in the Cavity and Space of the Ventricle ; in Hickets, those that adhere to the very Body of the Ventricle, the Disposition and Motion being both alike. As therefore what the Physicians call Nausea, is a vain and fruitless Vomit, and consequently the more fatiguing ; so too is a Hicket, when nothing is brought up.

1125. Yet touch, &c.] In these 18. v. the Poet takes notice of several other Symptoms and Tokens, that happen'd to those, who were visited with this Plague. First, says he, the exterior Parts of their Bodies were not hot

to the Touch, but only warm ; yet they look'd somewhat red, and were besower'd with small Pustules, as is the Body of those that have the St. Anthony's Fire : nevertheless they burn'd inwardly to such a Degree, that they could not endure to wear the slightest Cloaths, nor any, the thinnest Covering upon them : And it avail'd them nothing to expose their Bodies to the Cold and Wind, nor to leap into Rivers, or go down into Wells : nor could any Quantity of Water quench their Thirst.

Hippocrates, in 3. Epidem. c. 34. speaking of this Plague, says, that the Fever, which attended it, was *ἐκ δέχου*, not acute : and Galen, 9. de Sympt. Caus. cap. 6. says of Pestilential Fevers in general, that they are not violently hot : Now the Reasons, that Physicians give us, why some Bodies, in pernicious Diseases, are barely warm ; and the extream Parts of others even cold, are these : Some, say they, are warm, by reason of their small Provision of natural Heat, or because of their Age ; as in the Old, in whom, according to the Observation of Hippocrates, 6. Epidem. cap. 19. Fevers are the less acute, because, says he, their Body is cold : Others are warm in Fevers, by reason of their natural Constitution ; having from their Birth labour'd under a Want of Spirits and Blood : Besides ; in some Diseases, the like Disposition is acquir'd : sometimes too the Humours, stagnating in the outmost little Vessels, hinder the inwardly conceiv'd Heat from breaking out : and the same Humours, whenever they are heated, do, according to the difference of their Nature,

The Body, red with ULCERS, swoln with Pains,
 As when the SACRED FIRE spreads o'er the Veins.
 But all within was FIRE; fierce FLAMES did burn,
 1130 No CLOATHS could be endur'd, no GARMENTS worn;
 But

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Nature, impart a different Degree of Heat: for one sort of Heat attends an adust Choler; another a putrifying Phlegm: Tepidity is likewise caus'd in a malignant Corruption, by reason of the Inwardness and Profundity of the Fire, and the Nature of the Disease, which threatens Death to the Patient, not by manifest Symptoms, but by a clandestine Corruption of the whole Substance. The extream Parts and Members of the Body are cold and livid in those, whose vital Faculty is utterly decay'd, and dying away. They likewise are cold outwardly, whose almost total natural Heat is retir'd to, and gather'd about, their inflam'd Entrails, in order to succour decaying Nature. And one, or more of these Reasons concurring, will cause the Patient to be either barely warm, or even cold, outwardly, and to the Touch.

1128. The sacred Fire] Sacer Ignis, says Lucretius, by which Name the Latines know the Disease, which the Greeks call *Ἐρυσίπτελας*, and we St. Anthony's Fire, of which, according to Celsus, there are two sorts, thus describ'd by him. Sacer quoque ignis malis ulceribus annumerari debet; ejus duæ sunt species: alterum est subrubicundum, aut mistum rubore, atque pallore, exasperatumque per pustulas continuas, quarum nulla altera major est, sed plurimæ perexiguæ: Alterum autem est, in summæ cutis exulceratione, sed sine altitudine, latum, sublividum, inæqualiter tamen, &c. Celsus de Re medicâ, lib. 6. cap. 28. But in this Passage of our Au-

thour, we are to understand the first sort of that Disease, which, as describ'd above by Celsus, is an ulcerous Eruption, reddish, or mix'd of pale and red: and painful to the Patient, by reason of the continu'd Pustules or Whelks, not one of which is bigger than another, tho' there be an infinite Number of them, and all extreamly small. Which Description of Celsus seems to represent to us the Disease, that Physicians commonly call Herpes miliaris, from the Figure and Frequency of the small Blisters, or Wheals, which, rising on the uppermost Skin, and standing out but very little, are not unlike to Millet Seed, sown or scatter'd thick upon the Ground. The Disease, which they call Herpes only, is likewise a kind of St. Anthony's Fire; and seems to be the same that Pliny, lib. 26. cap. 11. calls Zoster, and Scribonius Largus, c. 106. Zona: this Disease comes on the middle of the Body, and, if it compass it about, is mortal; as, in the last Age, according to J. Langius, Epist. 32. it prov'd to be to the Marquis of Brandenburg. Some call it the Shingles; some, the Running-worm; and some, Wild-Fire. But the Erysipelas, that afflicted the infected Athenians, tho' but a cutaneous Disease, must nevertheless have been very troublesome to them, both on account of its Filthiness, and because it incommoded them, either standing or lying down.

1129. But all within, &c.] Thucydides in like manner describes this outward Tepidity, and inward Burning of the infected

But all, as if the PLAGUE that fir'd their BLOOD,
 Destroy'd all Virtue, Modesty, and Good,
 Lay NAKED, wishing still for cooling AIR,
 Or ran to SPRINGS, and hop'd to find it there :
 1135 And some leapt into WELLS ; in vain : the HEAT,
 Or still increas'd, or still remain'd as great.

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fected in these Words. Καὶ τὸ
 μὴ ἔξωθεν ἀπομύσσει σῶμα, ἐκ
 ἀγαν θερμὸν ἦν, ἔτε χλωρὸν, ἀλλ'
 ὑπερθερρὸν, πελιδνὸν, φλυκταίναις
 μικραῖς, καὶ ἑλκεσιν ἐξιδνηκός· τὰ
 δ' ἐντὸς ἔτως ἐκαίετο, ὥστε μίτε
 τῶν πάντων λεπτῶν ἱματίων καὶ σιν-
 δόνων τὰς ἐπιβολὰς, μὴτ' ἀμότι,
 καὶ γυμνὸν ἀνέχεσθαι. Their Bodies,
 says he, outwardly to the Touch,
 were not very hot, nor pale ; but
 reddish, livid, and beset with
 little Pimples and Whelks :
 yet inwardly, they burn'd to that
 Degree, as not to indure any the
 lightest Cloaths, or linnen Gar-
 ments to be upon them, nor any
 Thing, but meer Nakedness.
 Thus Thucydides : to which I
 add what Hippocrates, Aph. 48.
 teaches, That in Fevers, which
 have no Intermission, it is a fatal
 Symptom, when the outward
 Parts of the Body are cold, and
 the inward burning.

1131. As if, &c.] This
 Thought our Translatour has
 not copy'd from his Authour,
 but is beholden for it to the Bi-
 shop of Rochester, who, in his
 Plague of Athens, Stanza 17.
 says ;

So strong the Heat, so strong the
 Torments were,

They, like some mighty Bur-
 den, bear

The lightest Covering of Air :
 All Sexes, and all Ages do in-
 vade

The Bounds which Nature
 lay'd,

The Laws of Modesty, which she
 her self had made :

The Virgins blush not, yet un-
 cloath'd appear ;
 Undress'd they run about, yet
 never fear :

The Pain and the Disease did
 now

Unwillingly reduce Men to
 That Nakedness once more,
 Which perfect Health and Inn'-
 cence caus'd before.

1135. And some, &c.] Diodorus
 Siculus in the twelfth Book of
 his History, speaking of this
 Plague, says, that the Sick felt
 so intolerable a Heat within
 them, that many cast themselves
 into the very Wells and Foun-
 tains, hoping to cool and refresh
 their Bodies : But Thucydides
 relates this better, and more con-
 sonantly to Truth. Ἡδιστα,
 says he, τὰ ἂν ἐς ὕδαρ ψυχρὸν
 σφᾶς αὐτὰς ῥίπτειν, καὶ πομοῖ
 ἐδρασανὲς φρέατα τῇ δίψῃ ἀπαύσω
 ἑωυτοῖς· καὶ ἐν ταῖς ὁμοίαις κα-
 θείσκει τό τε πλεον καὶ ἐλαστον πο-
 τόν· That is to say, They would
 most willingly have cast them-
 selves into cold Water : and many
 of them, that were not look'd to,
 possess'd with insatiable Thirst,
 ran to the Wells : and to drink
 much or little was indifferent.
 This insatiable Thirst with which
 they were tormented, is finely de-
 scrib'd by the B. of R. in the
 Poem abovesaid, Stanza 16.

The Streams did wonder, that so
 soon

As they were from their native
 Mountains gone,

They

In vain they drank ; for when the WATER came
To th' burning BREAST, it hiss'd before the Flame :
And thro' each MOUTH did Streams of VAPOURS rise,
1140 Like CLOUDS, and darken'd all the ambient Skies.

The PAINS continu'd, and the BODY dead,
And senseless all, before the SOUL was fled :
PHYSICIANS came, and saw, and shook their Head.

No

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They saw themselves drunk
up ; and fear

Another Xerxes Army near :
Some cast into the Pit the Urn,
And drink it dry at its Re-
turn :

Again they drew, again they
drank ;

At first the Coolness of the
Stream they thank ;

But strait the more were scorch'd,
the more did burn,

And, drunk with Water, in their
drinking sank :

Some snatch'd the Waters up ;
Their Hands, their Mouths
the Cup :

They drunk, and found they
flam'd the more,
And only added to the burning
Store.

So have I seen on Lime cold Wa-
ter thrown ;

Strait all was to a Ferment
grown,

And suddain Seeds of Fire toge-
gether run :

The Heap was calm and tempe-
rate before,

Such as the Finger could in-
dure ;

But when the Moistures it pro-
voke,

Then did it rage, and swell,
and smoke,

And move, and flame, and burn,
and strait to Ashes broke.

————— The Heat,
Or still increas'd, or still re-
main'd as great. Lucretius
says,

Insedabiliter fitis arida corpora
mersans

Æquabat multum parvis humo-
ribus imbrem.

i. e. so great and sounquenchable
was their Thirst, that a great
Quantity of Water seem'd to
them to be but a little Water :
But some, instead of parvis, read
pravis ; and then the Sense must
be this : The Malignancy of the
Humours, which were the Cause
of their Thirstiness, equal'd, and
at length eluded, the great Plen-
ty of Water they drank : Hence
it came to pass, that they, who
drank but little, underwent the
like Danger with those who drank
a great deal : for their Thirst
was not extinguish'd, tho' they
drank ever so much. This last
Interpretation seems to agree
best with the Passage of Thucy-
dides next above-cited.

1137. In vain, &c.] This and
the three following Verses our
Translatour has added, by way
of Paraphrase, to his Authour.

1141. The Pains, &c.] In these
3. v. he teaches, that no Remedy
could be found to expel this
Disease ; so new and unknown
till then was this raging Pesti-
lence. Thus too Manilius, speak-
ing of this Plague ;

Qualis Erecîthêos pestis populata
colonos

Extulit antiquas per funera pa-
cis Athenas,

Alter in alterius lubens cùm fata
ruebat ;

Nec locus artis erat medicæ ; nec
vota valebant :

Cessera

No SLEEP, the pain'd and weary'd Man's Delight :
 1145 Their fiery EYES, like STARS, wak'd all the Night.
 Besides ; a thousand SYMPTOMS more did wait,
 And told sad News of coming hasty FATE :

Distracted

N O T E S.

*Cesserat officium morbis, & funera deerant
 Mortibus & lacrimæ: fessus defecerat ignis,
 Et coacervatis ardebant corpora membris.*

Which Sir Edward Sherburne thus renders :

Thro' Erechthean Lands when
 that Plague stray'd,
 And Athens waste by peaceful
 Fun'rals lay'd,
 When each contracted others
 Death ; then Art
 No Cure could find, nor Pray'rs
 could Help impart :
 Care to the Sick, and Fun'rals
 to the Dead,
 Ev'n Tears were wanting : those
 no Mourners shed :
 The weary'd Flame did from its
 Office cease,
 And Heaps of fir'd Bones burnt
 the dead Carcasses.

But if our Poet in this Place, as in others, imitates Thucydides, then this is not his meaning : for that Historian only says, that whatever Remedy was apply'd to procure Sleep to the Sick, they were still as far from Ease, and the Power to sleep as ever.

1144. No Sleep,] Hippocrates, Epidem 6. says, that nothing is more destructive of human Nature, or impoverishes, and wastes the Spirits, Blood, and Strength more, than watching, and want of Sleep : truly therefore does Ovid sing ;

Quod caret alternâ requie durable non est :

Hæc reparat vires, fessaque membra novat.

Heroid, Epist. 3.

See the Note on Book IV. v. 905. And the Physicians observing this fatal Symptom, had reason, as Lucretius expresses it, tacito misere timore, to mutter to themselves for fear : For, being at a Stand what to do, they went away without prescribing, and left their Patients in Despair of Relief. This Symptom too, and the Effects of it, are finely describ'd by the Bishop of Roch.

No Sleep, no Peace, no Rest,
 Their wand'ring and affrighted
 Minds possess'd :

Upon their Souls and Eyes
 Hell and eternal Horrour lies :
 Unusual Shapes, and Images,
 Dark Pictures, and Resemblances

Of Things to come, and of the
 World below,

To their distemper'd Fancies
 flow,

Sometimes they curse, sometimes they pray

The Gods above, the Gods
 beneath ;

Sometimes they Cruelties and
 Fury breathe ;

Not Sleep, but Waking now, was
 Sister unto Death.

Plague of Athens, Stanz. 17.

1146. Besides ; &c.] In these 14. v. he mentions many other Tokens of Death, that happen'd to those, who were visited with this Plague ; and which he has chiefly taken from Hippocrates, in Prognost. For Thucydides scarce mentions any of them.

1148. Di-

Distracted MIND, and sad and furious EYES;
Short BREATH, or constant, deep, and hollow SIGHS,
And

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1148. Distracted Mind,] Lucretius says,

Perturbata animi mens in moerore metuetur:

In which the Poet intimates, a total Dejection of Mind, occasion'd by too deep a Sense and Apprehension of the dangerous State they were in, and which was inevitably follow'd by Desperation; and all this was only the necessary Effect of their Disease: For the atrabileous Blood, that was engender'd by the violent Aduſtion, irrigated the internal Parts of the Diseas'd: and, by the unanimous Consent, and constant Observation of Physicians, Melancholy, Fear, Sorrow, and the like, are the necessary Consequences of such Blood, as well as of any other melancholick, excessive Humour: I say, excessive: For, tho' Men, in whose Bodies any melancholick Humour prevails, are naturally inclin'd and subject to Grief and Fear; yet, if that Humour be not excessive, and, either in Quantity or Quality, transgress not the Bounds of Nature, it never seduces or overthrows the Mind.

Sad and furious Eyes;] In the Original we read,

Triste supercilium; furiosus vultus, & acer.

i. e. Disconsolate Eyes, and frowning Eye-brows, together with a Sternness and Wildness of Look. These Symptoms, of which Thucydides is silent, Lucretius has borrow'd of the Coan Dictator, who, in Coac. Præſag. lib. 1. Sect. 2. cap. 3. teaches, that a good Colour in the Face, with a Wildness of Aspect, is an ill

Sign in acute Diseases; in which too, frowning Eyebrows are a Mark of Frensy. But, as we shall hear by and by, the Constitution of the whole Face was alter'd and amiss; therefore it portended something worse than Frensy. But tho' a frowning Forehead presage a Frensy in acute Diseases; because the Blood, by reason of its Corruption is degenerated into a plenteous Quantity of bileous and melancholick Humour; yet it is often observ'd in some, even when they are in perfect Health; nor does it portend any thing dreadful in them; tho' some are apt to be shy of their Conversation. But the Sternness and Wildness of Countenance, mention'd by Lucretius, was a most certain Token, not of an imminent, but of a present, Frensy, occasion'd by the Inflammation of the bileous Humour, accompany'd by the Corruption that bred it, either in the Præcordia, or in the Brain, that already sympathiz'd with the inferior Parts.

1149. Short Breath, or constant, deep, and hollow Sighs,] Lucretius says,

Creber spiritus, haud ingens, raroque coortus.

For the better understanding of which we must take Notice; that the Respiration in Animals, which is truly a mixt Function, it being both natural and voluntary, was excellently instituted by provident Nature, chiefly for the Refreshment of the Heart: For when she had made the Heart the chief Seat and Residence of the innate Heat, from whence that vivifying and lively Power is, thro' the Tubes of the Veins and

and Arteries, as likewise thro' invisible Pores, communicated to the Body of the Animal, it was of necessity, that this Member should be hot, and, in some Measure, inflam'd itself, that it might supply with Warmth all the other Members. But this Inflammation would have been fatal, or, according to the Nature of all Fires, a most certain Suffocation had ensu'd, had she not wisely provided against it, as well by the Introduction of cooling Air, as by the Expulsion and Excretion of the fuliginous Vapours, engender'd in the Heart; the first of which is perform'd by Inspiration; the last, by what we call Expiration. But between both these reciprocating and alternate Motions two Rests or Intervals necessarily intervene: wherefore the chief Differences of Respiration are distinguish'd, in regard to the Time of the Motion, into

Quick, Moderate, Slow,
In regard to the Rests, or Intervals, into

Thick, Moderate, Rare:
And, in regard to the Extension of the Organs, into
Great, Moderate, Small.

Now the Organs of Respiration are the whole Thorax, but chiefly the Midriff; on whose Motion the Lungs are extended every way, and receive the external Air: but when the Midriff ceases to move, the Lungs fall down, and breathe out the superfluous Air, together with the fumid nocent Exhalation: and by these alternate Breathings, the Indemnity of the ever-burning Heart is wisely secur'd. Since therefore, by the common Consent of all, the vital Faculty and even Life itself, are chiefly due to this Member, it is consonant to Reason, that they, who, by Rules of Art, are to judge of the Issue of a Disease, and of the

State of their Patients, should, almost preferably to the Motion of their Arteries, observe the manner of their Breathing, which Nature governs, according as the Heart requires. With good Reason therefore has Lucretius, enumerating the fatal Symptoms of those who were visited with this Plague, taken Notice of the Difficulty and Disorder of their Respiration, which he expresses after the Manner of Physicians, making a threefold Distinction of it. These several Disorders of their Respiration he has borrow'd from Hippocrates, and the first he takes notice of, is, creber Spiritus, a Thickness or Frequency of Breathing, which is spoken in regard to the Rests or Intervals: and this, says Hippocrates, in Prognostic. cap. 24. denotes a Pain, or an Inflammation in the Parts that are above the Præcordia: Secondly, haud ingens, not great, which admits of a double Interpretation; either that, in regard to the Extension of the Organs, their Respiration was moderate, and in due Order; or small: both which nevertheless contradict Hippocrates, who, in the Place above-cited, says in express Words, that their Respiration was great and strong, with long Intervals interposing: However, as Galen, in Prog. Com. observes, in the Torment they suffer'd, their Respiration might be both frequent and small, Nature already growing weak, and tending to a Decay; and their Organs being disorder'd with Inflammations. Thus too Hippocrates himself, in Coacis Prænotion. teaches, that a frequent and small Respiration betokens an Inflammation and Pain in the principal Parts: now we have heard already, that they were afflicted with a Peripneumony and Frensy; wherefore their Respiration, as Lucretius says, might be, haud ingens, not great, but moderate, or, even in the other Extream,

1150 And buzzing EARS; and much, and frothy SWEAT,
Spread o'er the Neck; and SPITTLE, thin with HEAT,
But

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stream, small, and below the due Mediocrity, The third and last Difference of their difficult Respiration, and which Lucretius expresses by raro coortus, a Rareness or Seldomness of Breathing, relates to the Time of the Motion, and is explain'd by Galen, in Com. t. 24. Progn. where he teaches, that a Rareness of Breath, that is to say, when the Rests or Intervals are long, if the Respiration be great and strong in regard to the Extension of the Organs, indicates a Delirium; if small, an Extinction of the innate, or natural Heat.

1150. Buzzing Ears,] Lucretius says,

*Sollicitæ porro, plenæque sonori-
bus aures:*

These were Tokens that the Humours were crept upwards by the Duct of the Arteries: and Hippocrates, in *Coacis Præfagiis*, teaches, that Sounds and Noises in the Ears, are a deadly Symptom in acute Diseases.

—Much and frothy Sweat, Spread o'er the Neck;] Lucretius says,

*Sudorisque madens per collum
splendidus humor.*

And this too he borrow'd from Hippocrates, in Progn. who there teaches, that Sweats are very good in all acute Diseases, if they happen at a critical Time, and intirely allay the Fever: That they are good likewise, if they come from the whole Body, and make the Patient the more easily bear his Disease: but if they effect nothing of this, they are not in the least beneficial: That cold Sweats, and such as

come only about the Head, Face, and Neck, are the worst of all, and, for the most part, very dangerous Symptoms. Besides; those that labour under Imposthumations, especially such as are caus'd by a Pleurisie, or by an Inflammation of the Lungs, are subject to sweat about the Neck. Thus Hippocrates: and from hence we see, that the Peripneumony, or Inflammation and Imposthume of the Lungs, under which the infected Athenians labour'd, was the Cause of this fatal Symptom.

1151. Spittle thin with Heat, &c.] The Words in the Original are,

*Tenuia sputa, minuta, croci continctâ colore,
Salsaque, per fauces raucas vix edita tulli.*

Which is taken almost Word for Word from Hippocrates, in the Place last above-cited: where he says, that the worst sorts of Spittle are those that are yellow, or of a reddish Colour; or that cause a violent Coughing, and that are thin, and come away in little Quantity. Now Lucretius calls these Spittles *tenuia*, thin, which is a Mark of their crudity, in regard to their Substance; *minuta*, that is to say, fewer than they ought to be, in regard to their Quantity; *croci continctâ colore*, yellowish, which was a Mark of their bileous Nature; and, *salsa*, salt, which Quality was due to the Corruption of the Humours, or to a mixture of salt and serous Humidity: for these are the Causes, that Galen himself, 2. de diff. Feb. cap. 6. assigns, of the saltness of Humours. And then the Poet, to shew us that these were not only the Excrements

But salt, and yellow; and, the Jaws being rough,
 Could hardly be thrown up with violent COUGH:
 The NERVES contracted, Strength in HANDS did fail,
 And

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crements of the Brain, that are often purg'd away by spitting, and are call'd Spittle, adds, per fauces raucas vix edita tussi, i. e. that they could scarce be thrown up, by Coughing, thro' their hoarse-sounding Jaws: for it is the proper Function and sole Business of a Cough, to serve the Members that are employ'd in Respiration, and to extrude and throw from thence whatever is molesting to them; And the Hoarseness Lucretius mentions, proceeded from the Exasperation of the Larinx, occasion'd by a Defluxion of salt Phlegm, which likewise fell upon the Lungs, and then caus'd a violent Cough.

1154. The Nerves, &c.] Lucretius says,

In manibus vero trahier nervi.—

This Contraction of the Nerves of the Hands was a sure Token of present Convulsions, which, as we have seen already, proceeded, according to Thucydides, from what he calls *λύγξ κενή*, an empty Hicket. See above in the Note on v. 1122. Now a Convulsion is an involuntary Contraction of the Parts, that communicate and partake with the Nerves, proceeding from a preternatural Cause. But whether some of our modern Physicians, who differ from the Antients, in assigning several other Causes of Convulsions, than those which these last allow'd of, be in the right, it is not our Business in this Place to inquire. Hippocrates, 8. de Comp. Med. positively asserts, That there are but two Causes of Convulsion; viz.

Repletion and Inanition: And Galen too, firmly avouches, that no third Cause can be found out: for the Siccity or Dryness, which the same Authour more than once affirms to be the Cause of Spasms, is included in, and reduc'd to, Inanition. The Hands therefore of the Infected were convuls'd, by reason of the Dryness and Inanition of the Nerves, and of the whole inflam'd Body, that was weaken'd and brought low by a manifold Evacuation: Besides; an Erysipelas, from whence proceeded a Phrensy, had seiz'd the Brain, and all its Membranes; hence the pernicious Filthiness of the corrupted Blood was imparted to the Marrow of the Spina, or Back-bone, from the first Knuckles or Joints of which arise the Nerves of the Hands and Fingers. Thus that Corruption, falling down, doubled the Difficulties, irritating, and filling, or choking up the Ducts of voluntary Motion.

Here our Translatour has omitted the latter Part of the Verse above-cited, in which his Authour mentions another Symptom, that attended this Disease: viz. a Trembling of the Joints,

*In manibus vero trahier nervi,
 & tremere artus.*

Now, according to the Definition of Physicians, Tremor est Symptoma in actione laesa; and this happens when the voluntary motive Faculty is deprav'd, by reason of its Disproportion to its own Object, which is the Body. For, since, in the Concretion of Animals, the Elements of Earth and

1155 And COLD crept from the FEET, and spread o'er all :

And

N O T E S.

and Water are predominant, and since they are for that Reason by Nature heavy, whatever moves, would by natural Inclination always descend, unless the motive Faculty sustain'd and kept it up : and if that Faculty be strong, and in due Order, all Things are perform'd aright, and according to the strict Command of the Will : but if that Faculty be weaken'd or disorder'd ; then there immediately arises a complicated Motion, which is call'd a Trembling ; and that proceeds from the motive Faculty's endeavouring to lift up the Member, which, at the same Time, by its own natural Inclination, is striving to sink down. Galen, in his Treatise, de Trem. Palp. cap. 3. brings a very evident Example of this alternate Endeavour of the Faculty and Member : I presume, says he, you have seen, how a Man's Legs will tremble, if he strives to run apace with a weighty Burden on his Shoulders : and how his Hands too will tremble, if he attempts to lift up, and carry, a Weight superiour to his Strength. Thus Galen : and this shews the Reason of the Trembling of the Joints, as well in old Age, as in Diseases : Well therefore might their Limbs and Joints tremble, the Strength of whose motive Faculty, in so great and various a Conflict, was extremely impair'd, and carry'd headlong to utter Destruction.

1155. And Cold, &c.] This Verse runs thus in the Original :

A pedibusque minutatim succedere frigus
Non dubitabat.

The Symptoms grow still more and more dangerous : for, tho' it cannot be controverted, that the Feet are cool not without Rea-

son ; inasmuch as, by Nature, they are both thin of Flesh, and abound with Nerves ; yet they grow cold besides, by reason of their Distance from the warmest Parts of the Body ; the Heat retreating to, and gathering itself together in, the Breast, in almost all Fevers, except in the bileous and burning ; and unless too the Disease be malignant, as this at Athens was. Galen, in his Comment on Epid. 3. teaches the Causes of this Coldness of their Feet : If the Disease, says he, be malignant, the extream Parts grow cold, by reason of the Decay of Strength, and the Greatness of the Inflammation, that attracts the whole Mass of Blood to itself : for without these, the Disease is never mortal. And the same Authour, in his Comment on this Aphorism of Hippocrates, In great Pains of the Belly, a Coldness of the extream Parts is an ill Sign, comprizes this whole Matter in a few Words. The Coldness of the extream Parts, says he, is caus'd by the Violence of the Inflammation in the Bowels : It proceeds likewise from the Defection and Decay of the vital Faculty ; which happens whenever the natural Heat is either extinguish'd, or suffocated, by reason of the great Quantity of it, then chiefly, when it becomes cold : It is occasion'd besides by any violent Pain, that siezes the middle Parts of the Body ; and by means of which Nature is contracted into itself, and the Blood repairs to it, abandoning not only the extream Parts of the Body ; as the Feet, the Hands, and the Head ; but the whole Skin likewise : Thus Galen : and hence we see, why the natural Heat, that was attack'd by so many Enemies, languish'd and decay'd, minutatim, as Lu-

And when DEATH came at last, it chang'd the NOSE,
And made it SHARP, and press'd the NOSTRILS close;
Hollow'd the TEMPLES, forc'd the EYE-BALLS in;
And

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cretius expresses it, by little and little, till at length a Coldness of the extream Parts succeeded in its Place; and that too, perhaps, not without a Lividness of Colour; both which are fatal Tokens in all acute Diseases.

1156. And when, &c.] Here the Poet begins to describe the Symptoms of an imminent and near-approaching Death, which discover'd themselves in the Face of the Infected. Now, of all the several Parts, that compose the human Face, the Preference is justly due to the Nose and Nostrils, because of the Comeliness they add to, or detract from, the whole Structure of the Face: according to which Opinion Horace sung long ago;

Non magis esse velim, quam pravo vivere naso
Spectandum nigris oculis, nigroque capillo.

But, tho', as Galen, in his Book de opt. sec. cap. 26. truly observes, acuminated Nostrils, and hollow Eyes are, in some, Tokens of Death; but natural in others: yet in the diseas'd Athenians, of whom our Poet is speaking, they were preternatural, and proceeded from the Force of the Disease, which had overpower'd the Strength of the Body: Since therefore the Countenance of the Sick was very unlike, and different from, the Aspect of the Healthy, tho' but in one part of it; we may well, with Hippocrates, in Progn. c. 5. call it a most dangerous Symptom: For a sharp Nose and compress'd Nostrils, on many Ac-

counts, portend the worst that can happen. The Nose itself is compos'd of two Substances; the one cartilaginous, the other bony: The bony Part of it remains always firm and unshaken; nor is it expos'd to any Motion or Damage; but the cartilaginous or gristly Substance of it is subject to both: for in the first place, the Wings, or round Risings on either side of the Nose are mov'd naturally by their own Muscles: of which you may consult at large Julius Casserius, in his accurate Treatise, de Fabricâ Nasi; but with this Caution nevertheless, not to take the two Muscles, which he lately invented, for the Janitores, as he calls them, Porters of the Nose, till Use and Experience convince us, that we can, whenever we list, compress the Nose, and contract or straiten the Passages of it. But that extream Part of the Nose, because it is more carneous, and contains more Humidity than the other, is sooner affected by Diseases: and what great Necessity soever urges, the innate Power of Motion is taken away from the Muscles, whenever Nature is overpower'd, and worn out by Disease: Hence the Nostrils are compress'd; and, what necessarily follows, the Cartilage and Muscles of the Nose being grown dry, the globulous Part of it is attenuated and contracted.

1158. Hollow'd, &c.] The Causes of these Events we learn from Galen, who, in Comment. Progn. teaches, that such Accidents proceed, either from some Cause that wastes and corrupts the carneous Parts of Animals,
or

And chill'd, and harden'd all, and stretch'd the SKIN:
 1160 They lay not long, but soon did LIFE resign;
 The Warning was but short, eight Days or nine.

IF

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or from the Weakness and Decay of the natural Heat, which can no longer extend itself into the extream Parts of the Body; but remains in little Quantity confin'd to the Bowels only. Besides; it always happens in these Cases, that so great a Portion of Blood and Spirits flows not to the extream Parts of the Body, as did before, when Nature was fully provided with them: for which Reason, a great alteration of the natural Habit of Body is apparently discern'd in the Face: and these are the Causes, that the Eyes first of all are contracted and hollow'd: For, being of a softer Substance than the other Parts, they swell and protuberate when they are supply'd with a sufficient Quantity of Spirits; but, for want thereof, they sink in and subside. Add to this, that the Muscles of the Temples are consum'd and wasted away, by the Malignancy, or by the Duration, of the Disease; and disabled Nature is render'd incapable to repair that Loss: Hence the Temples are hollow'd, and, the jugal Bone being prominent, the Eyes seem to be sunk within their Sockets.

1159. And chill'd, &c.] These Effects, according to Galen, proceeded from the same Causes we mention'd before in the Note on v. 1155. where we produc'd the Authority of that Authour.

1160. They lay, &c.] In these two Verses the Poet tells us, that they dy'd generally the eighth or ninth Day after they were taken sick: from which Thucydides

varies a little: for his Words are as follows: Καὶ τὸ σῶμα, ὅσον πρὸς χεῖρον καὶ ἡ νόσος ἀκμάζοι, ἐκ ἡμαραινέλο, ἀμ' ἀντέϊχε ὡδὲ δόξαν τῇ ταλαιπωρίᾳ, ὥς εἰ διεφθείρητο οἱ πλείστοι ἐναλίοι ἢ εβδομαῖοι ὑπὸ τῷ ἐνὸς καίματι, ἔτι ἐχούσης τι δυνάμεως: that is to say: As long as the Disease was at the Height, their Bodies wasted not, but resisted the Torment beyond all Expectation, insomuch that most of them dy'd of their inward Burning, in nine or seven Days, and whilst they yet had Strength. Whoever desires to be satisfy'd of the Power of these critical Days, in judging of Diseases, may consult Galen, de Crisibus de dieb. decretor. where his Curiosity will be abundantly contented. I will only take Notice, that the Pestilence, which rag'd in Italy, in the Year 1548. was much more violent at the time of its first breaking out: for, as Guido Cauliacus relates, they dy'd within three Days after they fell sick: and the Florentine Historian, Mattheo Villano, speaking of the same Plague, says; e morivano, chi di subito, chi in due, e chi in tre dì: i. e. and they dy'd, some suddainly, some in two, and some in three Days. And the Plague that desolated the same Countrey in the Year 1631. was scarce less violent; for it snatch'd them away in three, or four Days at most, say the Authours who have written of it.

1162. IF

If any liv'd, and escap'd the fatal Day,
 And if their LOOSENESS purg'd the PLAGUE away,
 Or ULCERS drain'd; yet they would soon decay:
 1165 Their WEAKNESS kill'd them: Or their POISON'D
 BLOOD,
 And STRENGTH, with horrid Pains, thro' Nostrils flow'd.
 But those that felt no FLUX, the strong Disease
 Did oft descend, and wretched MEMBERS sieze:

And

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1162. If any, &c.] Here the Poet tells us in 13. v. that if any chanc'd to escape, as indeed some of them did, yet even they were forc'd to compound for their Lives, with the loss of some of their Members, either their Eyes, or their privy Parts, or Feet, or Hands: for the whole Virulence of the Disease, falling upon those Parts of the Body, caus'd so great a Corruption, that, for fear of Death, they were necessitated to submit to an Amputation of them. Nay, says he, so great an Oblivion of all things siez'd upon some, that they knew not even their own selves, nor remember'd who they were.

1163. And if, &c.] This too Lucretius has taken from Thucydides, who says: 'Εἰ διαφύγοιεν, ἐπιχαλίοντι τῇ νοσήματι ἐς τὴν κοιλίαν, ἢ ἐλκώσεως τὴν αὐτῇ ἰχθυῶσιν ἐγγιγνομένης, καὶ ἀσπρῶσθαι ἅμα ἀκράτῃ ἐπιπλήσεως, οἱ πολλοὶ ὕστερον ἀπὸ τῆς ἀσθενείας διεφθείροντο. If, says he, they escap'd that (their inward Burning) then the Disease falling down into their Bellies, and causing there great Exulcerations, and immoderate Looseness, they dy'd, many of them, afterwards thro' Weakness.

1165. Or their poison'd Blood, &c.] A Pain in the Head is very frequent in all pestilential Diseases: nay, some have thought fit to place it among the forerunning Tokens of an approaching Plague.

But the Pain, mention'd by Lucretius, proceeded not from a cold, or vaporous Cause; but from too great a Quantity of corrupted Blood; which oppress'd the Head with its Weight, inflam'd it with its Heat, and, by its Malignancy, disorder'd the Membranes of the Brain. Hence Nature, rowzing up to her own Relief, endeavour'd to expel the offensive Humour thro' the Passages of the Nostrils, which are the proper Emunctories of the Head: But since the Blood, besides its over-abundance, was replenish'd with a certain Virulency, it grew extreamly refractory and rebellious to Nature, and the whole Mass of it, all at once, flow'd to the Place, where it had found an open Passage; and there discharg'd itself, even as a rapid Torrent, whose Mound is thrown down, pours out all its Waters thro' the gaping Breach: No Wonder therefore, that, as Lucretius says,

Huc hominis totæ vires, corpus-
 que fluebat.

1167. But those, &c.] The Loss of their Members, which Lucretius mentions in these 6. v. following, is describ'd by the Historian, in these Words:

Διεξίει γὰρ διὰ πάντος τῆς σώματος, ἀνωθεν ἀρχαίμενον τὸ ἐν τῇ κεφαλῇ πρῶτον ἰδρυθὲν κακόν, ὃ εἴ τις ἐκ τῶν μεγίστων (κινδύνων) δηλοῖται.

And there it rag'd with cruel Pains and Smart;
 1170 Too weak to kill the WHOLE, it took a PART:
 Some lost their EYES, and some prolong'd their Breath,
 By loss of HANDS: so strong the FEAR of DEATH!

The

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διλονότι. Schol.) περιγένοιτο, τῶν
 γε ἀκρωτηρίων ἀντίληψις αὐτῇ
 ἐπεσήμενε, κατέσκηπτε ὃ καὶ εἰς
 τὰ αἰδοῖα, καὶ εἰς ἀκρας χεῖρας,
 καὶ πόδας· καὶ πομοὶ σερισκόμενοι
 τέτων διέφευγον, εἰσι δ' οἱ καὶ τῶν
 ὀφθαλμῶν. Thucyd. For the Dis-
 ease, says he, which first of all
 took the Head, (see above
 v. 1104.) began above, and came
 down, and pass'd through the
 whole Body: and whoever over-
 came the worst of it, was never-
 theless mark'd with the loss of
 some of his extream Parts: for,
 breaking out both at their privy
 Members, and at their Fingers
 and Toes, many escap'd with the
 loss of these only: There were
 some likewise that lost their Eyes.
 Thus Thucydides: Yet it might,
 one would think, have been ex-
 pected, that they, who had had
 so copious a Discharge of cor-
 rupted Blood thro' the Nostrils,
 would, for the Future, have been
 exempted from any fresh At-
 tack: but Galen, lib. 1. de Crisib.
 cap. 3. solves this Difficulty;
 and teaches: That Bleeding at
 Nose may be beneficial, if it hap-
 pen at a due Time; but that
 otherwise it is rather prejudicial.
 Now the corrupted and virulent
 Humours, that wander'd all over
 the Bodies of the Infected, may,
 with reason be believ'd to have
 fallen upon some of the Mem-
 bers, rather than upon others;
 and particularly, as Lucretius,
 after Thucydides, says,

— in partes genitales cor-
 poris ipsas,

Of which our Translatour takes

no Notice. But the Reason, why
 the Corruption fell chiefly on
 those Parts, is, because of the
 Familiarity and Sympathy be-
 tween them, and the Members
 that serve to Respiration: For,
 we have heard already, that the
 greatest Part of the Dis eas'd la-
 bour'd under a Peripneumony, or
 Inflammation of the Lungs,
 which had occasion'd a violent
 Cough; and in those Cases, as
 Hippocrates says several Times
 of his own Experience, the Mat-
 ter generally discharges itself on
 the privy Parts: therefore it is
 not strange, that, for fear of
 Death, those Wretches suffer'd
 an Amputation of their Pudenda;
 and, as Lucretius sings,

Vivebant ferro privati parte vi-
 rili.

Of which too our Translatour is
 wholly silent. And we may
 easily believe, that the Defluxion
 of Humours on those Parts, oc-
 casion'd such a Corruption, as
 reduc'd Physicians to their last
 Remedies, Amputation and Fire,
 since Galen, in his Comment on
 Epidem. 3. firmly avouches, that,
 even where there is no pestilen-
 tial Infection, if an Inflamma-
 tion, or an Erysipelas, siezes on
 these Parts, they very soon cor-
 rupt, and affect the superiour
 Parts of the Body: so that we
 are necessitated, says he, to cut
 away the Putrefaction, and to
 sever the Place, as being the Root
 of the Disease.

1171. Some lost their Eyes, &c.]
 Galen, in Com. Epidem. 3. af-
 cribes the Cause of this loss of
 Members, only to the Putre-
 faction

The MINDS of some did dull OBLIVION blot ;
And they their Actions, and themselves, forgot.

And

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faction of the Humours ; the Nature of which is to corrupt the Parts on which it siezes. Here Lucretius is carp'd at by P. Victorius, in var. Lektion. for not having, as he pretends, kept close enough to the Narration of Thucydides : He is excus'd however by Lambinus ; whom Hieronymus Mercurialis, lib. 3. var. Lektion. cap. 12. accuses of being a Plagiary, in the Defence he makes for our Authour.

1173. The Minds, &c.] Thucydides in like manner. Τὰς δὲ καὶ λήθην ἐλάμβανεν ἀνθρώπων ἀναστάνας (ὕγιάντας. Schol.) τῶν πάντων ὁμοίως, καὶ ἠγνόησαν σφᾶς καὶ αὐτὰς καὶ τὰς ἐπιηδείας. That is to say : And many of them, presently upon their Recovery, were taken with such an Oblivion of all things whatsoever, that they neither knew themselves, nor their Acquaintance. Tho' the loss of Memory be not uncommon in acute Diseases, yet it is frequent in Chronical Distempers, that are of a long Duration. It is related of Benedictus Florettus, a Person of universal Learning, who liv'd in the last Age, that having long struggled with a Disease of eight Months Continuance, he at length overcame his Adversary ; but in the Conflict had intirely forgot the Greek Tongue, of which he had been a great Master ; as likewise the Rules of metrical Numbers in all Languages whatsoever. Nor does the Memory decay through the Means of Diseases only, but of old Age likewise ; and sometimes too it is lost even in the Vigour and full Strength of Life, either by external, or internal Causes : Well therefore may we declaim with Pliny ;

Memoria nihil æquè fragile est in homine, morborum, & casus injurias, atque etiam metus sentiens ; aliàs particulatim, aliàs universim, cap. 24. There is nothing, says he, in Man so frail as his Memory ; it being obnoxious to the Injuries of Diseases and Accidents, nay, even of Fear : sometimes it is lost in Part, sometimes totally. We need not therefore be astonish'd, that they, who were visited with the most acute of all Diseases, a virulent Plague, lost their Memory. The only Cause of which was the Corruption of the Humours, which had, as I may say, laid violent Hands on Nature, and alienated the Parts from their due Constitution. It is indeed hard to explain the Manner how this comes to pass : but it is almost generally held, tho' some few are of another Opinion, that loss of Memory proceeds, not only from a cold and humid Distemperature, but from a dry likewise : for Galen, 3. de loc. aff. relates of his own Knowledge, that this Misfortune happen'd, through Dryness, to a certain studious, sedentary Person, and to a sturdy, labouring Peasant. The Bishop of Rochester, in the following Verses, finely describes these Miseries of the surviving Athenians ; who had been visited with that fatal Pestilence,

But if thro' Strength, or Heat of Age,
The Body overcame its Rage ;
The vanquish'd Evil took from them,
Who conquer'd it, some Part, some Limb :
Some lost the Use of Hands, or Eyes ;
Some, Arms ; some, Legs ; some, Thighs.
Some

1175 And tho' the scatter'd BODIES naked lay,
 Yet BEASTS refus'd ; the BIRDS fled all away,
 And us'd their Wings to shun their easy Prey :
 They fled the STENCH ; whom Tyrant Hunger press'd,
 And forc'd to taste, he prov'd a wretched GUEST ;
 1180 The PRICE was LIFE : It was a costly Feast !

Few

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Some all their Lives before
 forgot ;
 Their Minds were but one dar-
 ker Blot :
 Those various Pictures in the
 Head,
 And all the num'rous Shapes
 were fled :
 And now the ranfack'd Me-
 mory
 Languish'd in naked Pover-
 ty,
 And lost its mighty Treasury :
 They pass'd the Lethe Lake, al-
 tho' they did not die.

Plague of Athens, Stan. 13.

1175. And tho', &c.] In these
 12. v. the Poet describes the great
 Corruption, that attended this
 Pestilence : and which, says he,
 was so excessive, that even the
 Birds and Beasts of Prey, but
 especially the Dogs, who had tast-
 ed of the dead Bodies, dropt
 down dead immediately : Nay,
 so noisome was the Stench of the
 unbury'd Carcasses, that neither
 in Athens, nor around the City,
 were any ravenous Birds seen by
 Day, nor any wild Beasts by
 Night. In like manner Thucydi-
 des, Ταὐτὰ ὄρνεια καὶ τελεόποδα, ὅσα
 ἀνθρώπων ἀπὸ τῆς, πομπῶν ἀτάφων
 γιγνομένων, ἢ ἐπεσθῆναι, ἢ γευσά-
 μενα διεφείρετο, i. e. The Birds
 and Beasts, that us'd to feed on
 human Flesh, tho' many Bodies
 lay abroad unbury'd, either came
 not at them ; or, if they tasted,
 perish'd. Thus too the Bishop
 of Rochester, in the Poem above-
 cited, Stanza 18.

Scatter'd in Fields the Bodies
 lay :

The Earth call'd to the Fowls to
 take their Flesh away :

In vain she call'd ; they came
 not nigh,

Nor would their Food with their
 own Ruin buy ;

But, at full Meals, they hunger,
 pine, and die :

The Vultures afar off beheld the
 Feast,

Rejoic'd, and call'd their
 Friends to taste :

They rally'd up their Troops
 in haste :

Along came mighty Drovers,
 Forsook their young Ones, and
 their Groves ;

Each one his native Mountain,
 and his Nest :

They come ; but all their Car-
 casses abhor ;

And now avoid the dead Men
 more,

Than weaker Birds the living
 Men before :

But if some bolder Fowl the Flesh
 essay,

They were destroy'd by their
 own Prey.

1178. They fled the Stench ;]
 Thucydides says only, that they
 came not near the dead Bodies,
 but gives not the Reason of it :
 that is to say, whether it hap-
 pen'd out of any natural In-
 stinct, which is often observ'd
 in Brutes ; or whether any of
 their Senses gave them Notice of
 the Danger. But Lucretius takes
 away this Difficulty, and says,
 that the wary Birds and Beasts of
 Prey were admonish'd by their
 Smell,

Few BIRDS appear'd ; no Wing could serve for Flight :
The BEASTS scarce dar'd to trust themselves to Night :
The

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Smell, to keep away from the dead Carcasses, ut acrem, says he, exirent odorem. Now of all the feather'd Kind, the Vulture is said to have the most exquisite Smell, or even to know beforehand where he shall find his Prey. This is confirm'd beyond all Dispute, if we may credit Horus Ægyptius, a very antient Authour, who says; That, in Time of War, Vultures repair seven Days before, to a Place where a Battel will be fought: and even that they haunt chiefly about that Part of the Army, where the greatest Slaughter will be made. But, allowing this to be true, it can not be ascrib'd to their Smell, or any other of their Senses, but rather to a presaging Instinct, that Nature has confer'd upon them: A Credulity, which Plautus long ago derided, when he said,

Quasi vulturij triduo prius divi-
nabant, quo die esituri fient.

And indeed, who, but a superstitious Augur, can give credit to so extravagant a Notion; or believe, that Vultures, by their Smell, can distinguish between Bodies that are to die in a few Days, or to live a longer time. The Truth is, that they generally keep with Armies, because they feed on the Garbage and Offals of Beasts, a great Number of which are daily slain for the Subsistence of such a Multitude of Men.

1181. Few Birds &c.] Lucretius says,

Nec tamen omnino temerè illis
solibus ulla

Comparebat avis: ———

This too is confirm'd by Thucy-

dides in these Words: Τεκμήριον ὅ (viz. modò dicta vera esse) τῶν μὴ τοιούτων ὀρνέων ἐπίπεψις σαφὴς ἐγένετο, ἢ ἐκ ἐωρῶντο ἔτε ἄλλως, ἔτε δὲ τοιούτων ἔδεν. i. e. An Argument that what I said, touching the Birds, is true, was the manifest Defect of such Fowl, which were not then seen, neither about the Carcasses, nor any where else.

1182. The Beasts, &c.] Lucretius, to augment the Horrour, adds this Circumstance, of which Thucydides is silent; That even the wild Beasts hid themselves in their Dens, where nevertheless they dy'd at length of the Infection: a most certain Argument, that the Disease overcame the Strength of all mortal Animals; and that too not only of the Body, but of the Mind: insomuch that its Rage and Cruelty, far surmounted all Expression of Words; as Thucydides observes, and made it appear to be a kind of Sickness, which exceeded humane Nature in the Fierceness with which it handled every one; and likewise to be none of those Diseases that are bred amongst us. But from this Passage of our Authour we may make two Observations: First, That a Plague is common to all Animals, and propagated from Men into Beasts; and, on the contrary, from Beasts into Men: Secondly, That a pestilential Venom does not end with the Life; but remains in the dead Body; tho' it be not so virulent by reason of the Want of Heat: But when the putrilaginous Heat has succeeded in the Place of the natural, it emits a pernicious and fatal Infection, as may be prov'd by many Experiments: This is indeed contro-

The PLAGUE walk'd thro' the Woods; in ev'ry Den
 They lay, and sigh'd, and groan'd, and dy'd, like MEN.
 1185 The faithful Dogs did lie in ev'ry Street,
 And dy'd at their departing MASTERS Feet.
 Disorder'd FUNERALS were hurry'd on ;

No

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controverted by some; but to no Purpose: for their main Argument is, the Example they bring of venomous Animals, which nevertheless, they say, retain no Poison after they are kill'd: But common Observation abundantly evinces the contrary.

1185. The faithful Dogs, &c.] It is generally testify'd by all Authors, that Dogs have been first infected with, and, before any other Animals, have felt the first Fury of, a coming Plague. Thus Homer, in Iliad. H. exposes, *κύνας ἀργούς*, the white Dogs first to the Infection: And

Strage canum primò,
 says Ovid; Metam. lib. 8. after whom Silius Italicus has copy'd,

Vim primi sensere canes.—

lib. 14.

And the Reason, why Dogs feel the first Attacks of a pestilential, contagious Disease, according to Eustathius, is, because of their exquisite sense of Smelling; of which Ælian likewise approves. Others blame the pestilent Exhalations of the Earth, to which, say they, the Dogs, by reason of their Proximity to it, are most obnoxious. But the Opinion of Thucydides, which we mention'd before, seems the most plausible.

Οἱ δὲ κύνες, says he, μάλλον αἰσθίσιν παρ' ἄλλων τῶ ἀπολαίνοντι. Ἀπὸ τὸ ἐνδοιασμένον. which Hobbes thus renders. But by the Dogs, because they are familiar with Men, this Event was seen much

clearer. For so Hobbes has render'd it: But why may not the *ἀπὸ τὸ ἐνδοιασμένον*, be rather interpreted, ob convictum, because of their eating of the same sort of Food? For it not only indicates the Contagion, which is the most potent Propagator of Plagues, even into Men, but a certain, I know not what, sickly Preparative, or Analogy, as they call it, proceeding from a common Food with particular Men. Nardius relates, that he knew a certain Prince, who was taken with a violent Vomiting of Blood, that was occasion'd by an external Cause: this Prince was extreamly fond of one of his Grey-hounds; who, not long after, of his own accord, and without having receiv'd the least Hurt, vomited Blood likewise; till at length he dy'd, wasted with a long Disease, and swell'd with a Dropsie; all which Accidents had likewise happen'd to his Master: and, what is yet more strange, the Bowels of both of them were observ'd to be tainted with a like Corruption.

1187. Disorder'd Funerals, &c.] Here the Poet describes the Neglect of funeral Rites, during the Time of the Plague: However, it is most notorious, how much Cost and Ceremony the Antients, and more particularly the superstitious Athenians, were wont to bestow on the Funerals of their Dead: Of which we shall have occasion to speak more at large on v. 1246. Mean while what Lucretius here intimates is, That no solemn Pomp or Rites were observ'd; that no Friends nor Relations attended the dead

Bodies

No decent MOURNERS, nor a friendly GROAN :
Neglecting others Fates, all wept their own.

No

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Bodies to their funeral Piles ;
but either suffer'd them to lie
abroad unbury'd, or cast them
carelessly on the Piles that had
been prepar'd for others. This
tumultuous Disorder of their
Funerals, is finely describ'd by the
Bishop of Rochester,

Mountains of Bones and Car-
casses

The Streets, the Market-Place
possess,

Threat'ning to raise a new Acro-
polis.

The Woods gave fun'ral Piles
no more ;

The Dead the very Fire de-
vour,

And that almighty Conqu'rour
over-pow'r.

The noble and the common
Dust

Into each others Graves are
thrust :

No Place is sacred, and no
Tomb ;

'Tis now a Privilege to con-
sume :

Their Ashes no Distinction
had :

Too truly all by Death are equal
made ;

And poor Men's Bones the noble
Urns invade.

Plague of Athens, Stanza 30.

1188. No decent Mourners, &c.]
Tears and bewailing the Dead
were no small Part of funeral
Exequies; whence Servius on Vir-
gil, *Æn.* 11. says, *Sine fletu non
est sepultura* : the Want of Tears
being accounted as great a Mis-
fortune, as even the Deprivation
of Funeral itself. Therefore Vir-
gil, in *Æn.* 11. joins them as
alike calamitous :

Nos, animæ viles, inhumata, in-
fletaque turba :

And Ovid, in *Metamorph.* 11. in-
troduces the drowned Ceyx ap-
pearing, and speaking thus, to
Halcyone :

Surge, age, da lacrymas, lugu-
briaque indue, nec me
*Indeploratum sub inania Tarta-
ra mitte.*

Which Sandys thus renders ;

Rise, weep, and put on Black ;
nor undeplor'd,
For pity, send me to the Stygian
Ford.

For the Antients believ'd the
Dead to be comforted and de-
lighted with the Tears of their
surviving Friends : And this is
the reason, that, in the antient
Inscriptions on Tombs, we so
frequently find,

LACRIMAS POSUIT.

CUM LACRIMIS POSUIT.

LACRIMIS ET OPOBAL-

SOMO UDUM CONDI-

DIT.

TUMULUM LACRIMIS

PLENUM DEDIT.

and the like ; of which Guthe-
rius, *de Jure Manium*, lib. 1.
gives many Examples. And for
this Reason too Manilius, speak-
ing of this Plague, by the want of
so mean and ordinary an Obse-
quy, aggravates the Miseries of a
pestilential Mortality, by which
Mankind is depriv'd of all the
tender Resentments and Benefits
of commiserating Humanity.

— Funera

1190 No common REMEDY did Health impart
To all ; PHYSICK was grown a PRIVATE ART :

For

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— Funera deerant
Mortibus, & lacrimæ : fessos de-
fecerat ignis ;
Et coacervatis ardebant corpora
membris.

Manil. lib. i. v. 886.

These therefore were a sadder
Kind of Funeral than that which
Virgil. *Æneid.* ii. gives to the
slaughter'd Latines, for they had
yet Wood to burn them,

Cætera confusæque ingentem cæ-
dis acervum
Nec numero, nec honore cre-
mant. —

Upon which last Words Guthe-
rius observes ; Nec numero, nec
honore combusti dicuntur, qui
confuso lignorum acervo lento
dabantur igni, multis corpori-
bus simul congestis. And this,
by Macrobius, is call'd tumul-
tuarium funus, and only us'd in
calamitous Accidents. In which
Kind of promiscuous Funerals, it
is noted by the same Authour,
that it was usual, to every ten
Mens Bodies, to add one Wo-
mans, to make them burn the
better. Of which he likewise
gives this Reason : Quod mulie-
bre corpus juvabat arduentes viros,
non calor erat, sed pinguis car-
nis, & oleo similis. Vide Ma-
crobius, Saturn. lib. 7. cap. 7.

1190. No common Remedy,
&c.] In these 6. v. the Poet re-
lates, that all the Remedies of
Physick were apply'd in vain :
for the Medicaments that some
found Good by, were fatal, and
brought Death to others. In
like manner too Thucydides :

Ἐν τὲ ἐδὲν καλῆς ἱαμα, ὥς
εἰπεῖν, ὅτι χρὴν προσφύρονας ὠφε-
λεῖν· τὸ γὰρ τῷ ζυνευχόν, ἀμοντῆτο
ἐβλαπτε, σῶμα τὲ αὐτάρκες ὃν ἐδὲν
διεφάνη πρὸς αὐτὸ, ἰσχύος πρὸς ἢ
ἀσθενείας, ἀλλὰ πάντα ζυνήρει, καὶ
τὰ πάσῃ Διαιτῇ διεσπείρομενα·
Nor was there any, to say cer-
tain Medicine, that, apply'd,
must have help'd them : For, if
it did good to one, it did hurt
to another : nor any difference of
Body for Strength or Weakness,
that was able to resist it ; but it
carry'd all away, what Physick
soever was administred. Thus
Thucydides : And upon this
Passage of that Historian, the
Bishop of Rochester ingeniously
Paraphrases :

Physicians now could nought
prevail ;
They the first Spoils to the proud
Victor fall ;
Nor would the Plague their
Knowledge trust,
But fear'd their Skill, and there-
fore slew them first.
So Tyrants, when they would
confirm their Yoke,
First make the chieftest Men to
feel the Stroke ;
The chieftest and the wisest Heads,
lest they
Should soonest disobey,
Should first rebel, and others
learn from them the Way.
No Aid of Herbs, or Juices
Pow'r ;
None of Apollo's Arts could
cure,
But help'd the Plague the speedi-
er to devour.
Physick itself was a Disease ;
Physick the fatal Tortures did
increase :

Pre-

For that, which gave to ONE fresh VIGOUR, Ease,
And Health, and Strength, and conquer'd the Disease;
Ev'n

N O T E S.

Prescriptions did the Pains re-
new :

And Æsculapius to the Sick did
come,

As afterwards to Rome,

In Form of Serpent: and he
brought new Poisons with
him too.

Plague of Athens, Stanza. 15.

Common Remedy] The natural Remedies, that are us'd in extinguishing and driving away a pestilential Disease, are of two sorts: for some are call'd common, others particular. The common Remedies are Fires, Odours, Firing of Guns, a strict Regiment of Life, and what is more than all the rest, an avoiding of the Contagion, together with an Extermination and utter Destruction of all things, that may retain and preserve the Infection, as Cloaths, Bedding, and the like: as likewise to absent from all Company whatever for a certain Time. And, whatever Lucretius advances to the contrary, Hippocrates is said to have bethought himself of a common Remedy for this Plague: viz. by burning Piles of scented Wood at the Corners of the Streets. The particular Remedies are those, that are adapted to the Constitution and Habit of Body of each Person infected: and these in the Case of the Athenian Plague, as both the Historian and our Poet inform us, were all us'd in vain. And indeed, in vain hitherto have prov'd all the Cares and Endeavours of Men: and the Divine Providence has eluded the Attempts of those bragging Charlatans, who boast of their Panaceas, Amulets, and infallible Remedies against

the Plague, and often compels them dearly to rue their enormous Temerity: Not that I would be understood to mean, that the Care of the Sick ought to be committed to Fortune only: for there is an Honour justly due to Medicaments, that support the vital Faculty, and contain it within its due Bounds; as there is likewise to Topicks, when Experience has once establish'd and confirm'd the Usefulness of them. But what I say is, that the supream Wisdom has hitherto deny'd to Mortals, to find out any universal and certain Alexicacon for the Plague. And therefore Mattheo Villano, speaking of the Plague that rag'd in the Year 1348. says, That the Physicians, in any Part of the World, could not, either by Natural Philosophy, or by Physick, or by the Art of Astrology, find out any Remedy, or certain Cure for it: That some of them indeed, out of Covetousness, went to visit the Sick, and gave them their Remedies; but that by their own Death they evinc'd the Vainness of their Art, leaving their Lives as a Restitution for the Money they had unjustly taken. *E i Medici, says he, in catuna parte del Mundo, per Filosofia naturale, ò per Fifica, ò per Arte d' Astrologia, non hebbono Argomento, ne vera cura. Alquanti per guadagnare andarono visitando, e dando loro argomenti, i quali, per loro morte, monstrarono l' arte esser ficta, e non vera: assai per Coscienza lasciarono à restituere i danari, che di ciò havevano presi indebitamente.*

1192. For that, &c.] From what Lucretius, after Thucydides, says in this and the three following

Ev'n the same THING, with equal Art apply'd,
 1195 ANOTHER took, and by the PHYSICK dy'd.

All the INFECTED lay in deep DESPAIR,
 Expecting coming DEATH with constant Fear;
 Pale GHOSTS did walk before their Eyes, and fright:
 No dawning HOPES broke thro' their dismal NIGHT,
 1200 No Thoughts of HELP: This was a grievous Ill, (kill.
 This sharpen'd the PLAGUES Rage; these FEARS did
 Besides,

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following Verses, we may gather this Observation; that in each Plague there is not one only manner of Corruption, but that it differs very much, according to the various Dispositions of the Bodies and Humours; even tho' it derives its Origine from one and the same Cause.

1196. All the Infected, &c.] In these 6. v. the Poet teaches, That the greatest Calamity of all was; that as soon as they perceiv'd themselves seiz'd with the Disease, they fell into a Despair of Recovery, and neglected to take Care of themselves; a Neglect, that sometimes is more fatal than the Force of the Disease. Thus too the Historian: *Δεινότατον δὲ πάντος ἦν ἡ τὴν ἀθυμία, ὅποτε τις αἰδομένο κάμνων, πρὸς τὸ ἀνέλπιστον εὐθύς παραπορευόμενοι τῇ γνώμῃ πομπῇ μάλλον πρὸς ἐνδοσφάδες αὐτῆς, ἢ ἐκ ἀνελπίστον.* Thucyd. That is to say: But the greatest Misery of all was the Dejection of Mind, in such as found themselves beginning to fall sick: for they presently fell into Despair, and gave themselves over without making any Resistance. Now this Consternation and Dejection of Mind was prejudicial to them, on a double Account: For, besides that it very much impair'd their Strength, it brought with it this additional Mischief, that, despairing of Recovery, they thought it

to no purpose to take Care of themselves. And thus the Disease rag'd uncontroll'd, and soon was fatal to such as neglected the Means of their own safety, and gave themselves over for lost. And here we might take occasion to inquire narrowly into a Question, which some have started, viz. Whether an absent Person can catch the Plague by the Strength of Imagination? The Affirmative has many Sticklers for it, as may be seen in Fab. Paulinus, lib. 1. and the Negative is no less strenuously asserted by others: Imagination may indeed operate on our own Bodies, by reason of the mutual Consent and Sympathy, that each Part has to the other. But what Strength can it have to work on the Bodies of others? Who ever yet heard of a Pick-pocket, who, by the Intenseness of his Fantasy only, could get the Money out of anothers Purse? Or of a Hunger-starv'd Wretch, who, by the Strength of his Imagination, could get into his own Clutches, the Bread he saw lying at a Distance on a Baker's Stall? Besides in this Case of the Athenian Plague, both the Historian and our Poet expressly say, That the Disease preceded the Dread and Apprehension of it.

1198. Pale Ghosts, &c.] This Verse our Translatour has added to his Authour.

Besides, the fierce INFECTION, quickly spread,
When one poor Wretch was fall'n, to others fled :

One

NOTES.

1202. Besides, &c.] Here the Poet, in these 13. v. teaches farther, that some, tho' they came not to visit their Friends and Relations, or had neglected to tend them, caught nevertheless the Contagion, and dy'd like infected Sheep or Cattel : and, because they had neglected to take Care of their Friends, they too, in their Turn, were neglected by them. Thus too Thucydides, *Ἐλεργς ἀφ' ἐτέρῃς θανάτου ἀναπιμπλάμενοι, ὥσπερ τὰ πρὸς βάλαντα ἔθνησκον • ἢ τ' πλείστον φθόρον τῷ ὄντι ἐνεποίει, εἴτε ὃ μὴ θέλοιεν δεδιότες ἀλλήλοις προσίεναι, ἀπώλαντο ἔριμοι, ἢ οἰκίαι πολλὰ ἐκενώθισαν ἀπορία τῇ θανάτου* • They dy'd, says he, like Sheep, being infected by mutual Visitation : And if Men, for

Fear, forbore to visit them, then they dy'd forlorn : so that many Families became empty, for want of such as should have taken Care of them. Thus Thucydides : And were there no other Testimony for Contagion to be found, than this of that Historian and our Poet, it would be abundantly sufficient, evidently to convince their Peremptoriness, who obstinately hold, that it was unknown to the Antients : and them too, who as positively assert, that the Air only is the Cause of epidemical Diseases ; and will not admit of Contagion, except only when substituted in the Place of the Air. But how much they are mistaken will manifestly appear by the following Animadversion.

Of CONTAGION, the chief Cause of a PLAGUE.



AS the Antients were not ignorant of, so they always apprehended, Contagions ; whatever some modern Authours have believ'd to the contrary. Lucretius, who copies after Thucydides, freely confesses in this Place, That the Effects of Contagion are felt from far ; and to him subscribe several of the Antients ; as Livy, lib. 3. cap. 25. Diodorus Siculus, lib. 14. Dionysius Halicarnassæus, lib. 10. and Eusebius, lib. 7. but, that they affect, when near at hand, is allow'd by all : for none deny, that to tend and touch the Sick, will spread abroad the Disease, and render it epidemical : Hence Virgil in Georg. 3.

Ne

Ne mala vicini pecoris contagia lædant.

And our Lucretius, v. 1241. of this Book,

Qui fuerant autem præstò, contagibus ibant.

And yet L. Septulius, in lib. 2. de Peste, cap. 8. too confidently affirms, That the third manner of Contagion, which, as we said before, the Physicians call, per fomitem, was unknown to the Antients, and never thought of by them. But, among many other Testimonies that might be alledg'd, this Mistake of his is evident from the following Verses, with which Virgil concludes his third Georgick :

Jamque catervatim dat stragem, atque aggerat ipsis
In stabulis turpi dilapsa cadavera tabo :

Donec humo tegere, ac foveis abscondere discunt.

Nam neque erat coriis usus; nec viscera quisquam,

Aut undis abolere potest, aut vincere flamma :

Nec tondere quidem morbo, illuvieque peresa

Vellera ; nec telas possunt attingere putres :

Verum etiam invisos si quis tentârat amictus,

Ardentes papulæ, atque immundus olentia sudor

Membra sequebatur : nec longo deinde moranti

Tempore, contactos artus facer ignis edebat.

Which is render'd by Dryden, as follows ;

At length she strikes an universal Blow :

To Death at once whole Herds of Cattel go :

Sheep, Oxen, Horses fall ; and, heap'd on high,

The differing Species in Confusion lie :

Till, warn'd by frequent Ills, the Way they found,

To lodge their loathsome Carrion under Ground :

For, useless to the Currier were their Hides ;

Nor could their tainted Flesh with Ocean Tides

Be free'd from Filth : nor could Vulcanian Flame

The Stench abolish, or the Savour tame :

Nor safely could they shear their fleecy Store,

Made drunk with poisonous Juice, and stiff with Gore,

Or touch the Web : but, if the Vest they wear,

Red Blisters rising on their Paps appear,

And flaming Carbuncles ; and noisome Sweat,

And clammy Dews, that loathsome Lice beget ;

Till the slow creeping Evil eats his Way,
Consumes the parching Limbs, and makes the Life
his Prey.

The Antients therefore knew what Contagion is, tho', perhaps, they were not fully aware of its great Power, nor of the many Ways of its imparting, and spreading itself abroad: and this is the Reason, that this chief Begetter of a Plague was then scarce held to be a Propagator of it. But in the last Age its Power was so manifestly discover'd, as to make the modern Physicians believe, that true Plagues, or those Infections at least, which they call Bubonick, are disseminated by Contagion only. In Florida, the Seasons of the Year, the Fruits of the Earth, the Winds, the Rains, all come regularly, and at due and constant Times: nor is there the least suspicion there of infectious Damps or Exhalations: yet, upon the arrival of an ordinary Fellow, who brought thither some inconsiderable Merchandise from an infected Place, the whole Countrey soon caught the Contagion, and essay'd the Fury of a pestilential Disease, till then, in those Parts, unknown before. Contagious Diseases, unless a timely stop be put to them, depopulate Provinces and whole Kingdoms, by sweeping away their Inhabitants. And this Observation is one of the Reasons, that, tho' but of late Days, Contagion has been held to be the chief Instrument, in beginning, and propagating a Plague. The Antients indeed could scarce be reconcil'd to the setting a private and particular Cause at the Head of a publick and general, or common Effect: but this Difficulty would not have startled them, had they reflected, that even that Cause may be said to be common, by whose Efficacy a Disease becomes Epidemical. Pliny, lib. 16. informs us, that they either banish'd the Lepers, or shut them up, and debarr'd them, from all manner of Conversation, that they might not infect the Sound; and if, thro' Negligence, this Care was at any Time omitted, the whole Society was infected with that most filthy Disease: of which no common Cause could be assign'd, besides Contagion. We read, that, in the last Age, a Secretary of the Popes Treasury, being return'd from Peru to Rome, brought the Itch along with him: which foul Disease, in a few Days, by that Means spread itself thro' the whole City: and that, when Lautrecchus besieg'd Naples, a small Number of Harlots, that were in the Camp, gave the Venereal Disease, till then unknown in these Parts
of

of the World, to his whole Army ; from whence it has since spread itself into Africa, Asia, and all over Europe ; treating Foreigners with greater Severity indeed, than its native Indians, among whom it was first known. And were not these common Causes, the first of which infected the whole City of Rome, the other almost the whole World ? Then, not to dwell too long on so evident a Matter ; let us call to Mind this Maxim of Lucretius :

Tangere enim, & tangi, nisi corpus nulla potest res.

lib. 4. v. 305.

Nothing, but Body, can be touch'd, or touch.

Whatever Things therefore meet, are Bodies ; not a naked Quality : But, according to Aristotle, lib. 1. de Generat. & Corrupt. Things then touch one another, when the extreamest Parts of them are together, be it done at what Distance you will. Contagion thus is not an empty Sound, but expresses the Manner, by which an Infection, by the means of Corpuscles, that exhale from an infected Body, communicates itself to one that is sound : and, tho' it not unfrequently touches, yet it sometimes imparts its Virulence thro' another Medium.

There are some nevertheless, who will not be reconcil'd to Contagion : and pretend to compel us to a necessity of owning, whether we will or not, and against Truth and Observation, That a Plague sometimes is bred, without any previous Contagion : otherwise it would be perpetual. To make this Assertion good, they bring, for Instance, a Countrey, where a new Plague is broken out ; and ask us ; Whether it be just then bred in that Countrey, or brought thither from elsewhere ? If we grant the first, then indeed adieu to all Contagion : if the last, they bid us name the originary Place, where it was bred : which would oblige us to the same Concession as the former. Therefore, say they, Contagion will propagate, but not begin, a Plague. Tho' this be not argu'd amiss, yet it is not so conclusive, as to hinder us from believing, that the whole Earth is at no Time free from a Plague ; and that there are certain Places, where the Seeds of Plagues are preserv'd, in order to break out at a certain Time : Æthiopia has an ill Name on this Account ; nor are Grand-Cairo and Constantinople much better spoken of : nay, almost all that vast Extent of Land, which the Turks inhabit, in some Part or other of it,

ever has had, and ever will have, more or less, the Plague among them: and this too thro' their voluntary neglect: for, they think it impious to struggle against Fate. But the Reason, why it does not always rage with the same Fierceness among them, is, the various Disposition of their Bodies, and the different State of the Air.

It is likewise observable, that every contagious Disease rages with greatest Violence at its first breaking out: but in Length of Time grows mild, and abates of its first Fury. Whoever doubts of this, let him compare the Mischiefs, that, heretofore, were caus'd by the Venereal Disease, with the Harms, that, now-a-days, attend it: let him weigh, besides, the Devastation, that in the last Age, the Small Pox brought upon the Indies, where, at its first coming, it swept away, in a few Days, a hundred Myriads of Mexicans. The Seeds therefore of pestilential Diseases decay, and wear away by Degrees; till, having found proper Humours to work on, and Spirits that make but weak Resistance, they break out afresh, and with greater Violence in other Bodies. To this Opinion subscribes the learned Felix Platerus, who, in his Treatise of the Causes of Fevers, after having made many Observations, that well deserve to be known and remember'd, argues to the following Purpose: It seems more reasonable, says he, to believe, that, in like manner as other Venoms, which, from the Beginning of the World, are innate and natural to certain Bodies, inhere and reside in them, so too this pestilent Venom may lurk, not only in the Bodies of such, as are visited with the Plague, but of others likewise, who are not yet taken with a Fever; or even in Cloaths, or any Thing of like Nature: and that it may be imparted and transferr'd from Body to Body; not only by mutual Contact, but by the intermediate Air intervening, and taking those invenom'd Seeds from one Body, and wafting them into another. Besides; a pestilent Venom, if it be attracted by Inspiration, chiefly affects the Heart, and kindles a Fever in a Moment: or, if it be caught by any other Means, and possesses any other Part of the Body, it either makes the same Progress to the Heart by Inspiration, or thro' some blind Passages; or else it stays for some time in the Part it first seiz'd on; and even in that Case, tho' it be propagated no farther, and tho' no pestilent Fever yet appear, the Body nevertheless is render'd infected by that Venom; which, sooner or later, may affect likewise the Bodies of others: And this is the reason, that such, as fly
from

from infected Places into others, that are free from the Plague, and stay there some time, are often, even after many Days, taken first with the Plague: or, if they are not taken themselves, they may nevertheless infect others: In like manner too Experience teaches, that a lewd Woman, who lies with a Man, tainted with the Venereal Disease, tho' she be not yet so infected by him, as to be sick of that Disease herself, may nevertheless infect others, who afterwards lie with her, with the same Disease: This too is attested by Fernelius: and therefore we dare confidently affirm, That the Seeds of Plagues, like other Venoms, are always residing in certain Bodies, in some Countrey of the World or other; and that they are propagated from thence into other places, in the manner above-spoken: Even as we know for certain, that the Venom of the Venereal Disease, which is well nigh as contagious and noxious, at least to Mankind, came first of all, creeping from Body to Body, from the Indies even to us; and now subsists no where but in Bodies, and wanders by Contagion out of some into others: Which venereal Disease, manifesting itself in this Manner, resides nevertheless, in other Places, in other Bodies; and, by some one or other of them, is carry'd back again into the same Countrey: Thus too the Plague, tho' it have often ceas'd to rage for a long Time together, in certain Places, is nevertheless inherent in certain Bodies, in some Part of the Earth or other; and, as is said above, is, in its due Time, deriv'd from thence, and breaks out in those Bodies, in which it lay dormant: Insomuch that no Necessity obliges us to hold, for this Reason, viz. because we hear nothing of it, nor where it rages, as if it were totally extinguish'd, and that the whole World were free from it; that therefore when it returns again, it is engender'd anew in the Air, and falls down from thence upon us: tho', notwithstanding all this, it cannot in the least be doubted, but that the Air is imbu'd with a malignant Quality, with which it may, and does sometimes, affect the Bodies of Animals: in like manner as we grant, that they are affected by a pestilent Contagion, proceeding from infected Bodies, and insinuating itself into other Bodies, in the Method above-mention'd: But that the Origine of this Contagion is due to the Air, can in no wise be granted for the Reasons before given. Thus far Platerus, with whom the generality of Physicians agree: For the Objections, which D. Sennertus, in lib. 1. de Caus. Pestil. cap. 21. has brought against him, are held to be trifling, and of no Validity.

One kill'd, the MURDERER did cast his Eye
 1205 Around ; and, if he saw a WITNESS by,
 Siez'd him, for fear of a Discovery.
 Those WRETCHES too, that greedy to live on,
 Or fled, or left infected Friends alone,
 Strait felt their Punishment, and quickly found,
 1210 No FLIGHT could save, no PLACE secure, from WOUND:
 A strong INFECTION all their Walk attends ;
 They fall as much neglected as their Friends :
 Like ROTTEN SHEEP, they die in wretched State ;
 And none to pity, or to mourn, their Fate. (Cries,
 1215 Those whom their Friends Complaints, and piteous
 Did force to come, and see their Miseries,
 Receiv'd

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1204. One kill'd, &c.] This and the two following Verses are a Paraphrase of our Translatour on his Authour.

1207. Those Wretches, &c.] Hence we see, that the saying of the Comick Poet has still prevail'd :

Proximus sum egomet mihi,

That Charity begins at home, as our ill-natur'd Proverb expresses it, and, consequently, that Men are more careful of their own Health, than of that of others. To abandon Friends in Sicknes, is a Piece of Cruelty detestable even in Heathens: how much more then is it to be abhorr'd in Christians? Yet Guido Cauliacus tells us, that in the Plague, that rag'd in the Year 1348. the Living, that they might not endanger their Lives by the Contagion, avoided to come near the infected: Insomuch, that whole Families dy'd without Attendance, and were bury'd without Priests: the Father visited not the Son, nor the Son the Father: Charity was extinguish'd, and Hope overthrown. In tantumque, says he, gentes moriebantur sine famulis, & sepeliabantur sine sacerdotibus: Pater non visitabat filium, nec filius patrem:

caritas erat mortua, & spes prostrata. Mattheo Villano acknowledges this to be true; and tho' he endeavours to lay the Blame on the Barbarians, after whose Example the Christians no less inhumanely abandon'd their Friends; yet he omits not to brand them with Infamy, as Men guilty of a Barbarity truly detestable, and till then unheard of among the Professours of Christianity.

1215. Those, &c.] In these 10. v. the Poet tells us, that such of them, as came to tend the Infected, were expos'd to a double Destruction: For, either they caught the Contagion of the Sick, and underwent the like Fate with them, or else, worn out with the Fatigue of tending them, they at length fell sick of the same Disease. But Shame as well as Piety excited them to serve their Friends in so great Distress: and thus the most virtuous among them expos'd their Lives to this Danger, and chiefly assisted their dying Friends. In like manner Thucydides: "Εἰς ἐπεσσομένους, διεφθέρουσι, καὶ μάλιστα οἱ ἀρεστῆς τι μελαποικίμῃ, αἰχρύνῃ καὶ ἡρεῖδαν σφῶν αὐτῶν ἐσιόντες, ὥστε τὰς φίλους, ἐπεὶ καὶ τὰς (τοὺς) τὰς

Receiv'd th' INFECTIOUS, and the FATAL BREATH:
An inn'cent MURD'ER he that gave the DEATH.

This kind of DEATH was best; so Men did choose
1220 (A wretched Choice!) this way their LIFE to lose:

Some rais'd their FRIENDS a Pile; that Office done,
Return'd, and griev'd, and then prepar'd their own:
A treble MISCHIEF this, and no Relief:

Not one but suffer'd DEATH, DISEASE, or GRIEF.

1225 The SHEPHERD midst his Flocks, resign'd his Breath;
Th'infected PLOUGHMAN burnt, and starv'd to Death:

By

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τὰς Schol.) ὁλοφύροισι τῶν ἀπο-
γιγνομένων τελευτώντες ἢ οἱ οἰκεῖοι
ἐξέκαμνον, ὑπὸ τῆς πόλεως κακῆς
πικρὰ μύθοι. That is to say, If they
forbore not to visit them, then
they dy'd themselves: For, out
of Shame, they would not spare
their own Persons, but went in to
their Friends; especially after it
was come to this Pass, that their
own Domesticks, weary'd with
the Lamentations of them that
dy'd, and overcome with the
Greatness of the Calamity, were
no longer mov'd with it.

1217. Receiv'd, &c.] Upon
this Calamity the Bishop of Ro-
chester thus paraphrases:

Here others, poison'd by the
Scent,
Which from corrupted Bodies
went,
Quickly return the Death they
did receive,
And Death to others give:
Themselves, now dead, the Air
pollute the more,
For which they others curs'd
before:
Their Bodies kill all that come
near;
And, even after Death, they all
are Murd'ers here.

Plague of Athens. Stanza 19.

1221. Some rais'd, &c.] This
and the following Verse run thus
in the Original:

Inque aliis alium populum sepe-
lire suorum

Certantes, lacrymis lassī, luctu-
que redibant:

Inde bonam partem in lectum
maerore dabantur.

i. e. After they had striven and
contended to bury the Bodies of
whole Families of their Friends
among those of the Friends of
others, they return'd weary'd
with Grief and Weeping: and
hence most of them took to their
Beds for Sorrow.

1225. The Shepherd, &c.]
The Poet, having laid before
our Eyes the lamentable and
tragical Condition of the City
of Athens, he now brings up-
on the Stage the Herdsmen,
Shepherds, and Peasants, who,
being visited with this cruel In-
fection, in Want of all Necessa-
ries, destitute of Friends, and
despairing of Relief, shut them-
selves up, some of them, in their
narrow Hutts, where they dy'd
by Heaps, destroy'd no less by
Famine than the Plague: while
others, for fear of the Enemy,
who were laying waste the whole
Countrey, and destroying all
with Fire and Sword, with the
Disease upon them, fled into the
City, and others, whose Strength
would not permit them to reach
thither, lay languishing in the
High-ways, naked, full of Ul-
cers, &c. What more dreadful,
what

By PLAGUE and FAMINE both the Déed was done:
 The PLOUGHMAN was too strong to yield to one :
 Here dying PARENTS on their CHILDREN cast,
 1230 There CHILDREN on their PARENTS breath'd their last :
 Th' infected PLOUGHMEN from the Countrey came,
 They

N O T E S.

what more dismal, can Imagination figure to itself?

1228. The Ploughman] This Observation is the Translatour's, not his Authour's.

1229. Here dying Parents, &c.] The Bishop of Rochester describes this Circumstance very pathetically in the following Verses :

Here, lies a Mother and her Child ;

The Infant suck'd as yet, and smil'd,

But strait by its own Food was kill'd :

There Parents hug'd their Children last ;

Here, parting Lovers last embrac'd ;

But yet not parting neither :

They both expir'd, and went away together.

The Friend does hear his Friends last Cries ;

Parts his Grief for him, and then dies ;

Lives not enough to close his Eyes.

The Father, at his Death, Speaks his Son Heir, with an infectious Breath :

In the same Hour the Son does take

His Father's Will, and his own make :

The Servant needs not here be slain,

To serve his Master in the other World again ;

They languishing together lie ;

Their Souls away together fly :

The Husband gasps ; his Wife lies by :

It must be her Turn next to die :

The Husband and the Wife Too truly now are one, and live one Life :

That Couple, who the Gods did entertain,

Had made their Prayers here in vain :

No Fates in Death could them divide ;

They must, without their Privilege, together both have dy'd.

Plague of Athens, Stan. 19 & 20.

1231. Th' infected, &c.] Thus Thucydides : *Ἐπίεσε δὲ αὐτὲς μάμον πρὸς τὰ ὑπάρχοντι πόνω ἢ ἡ ζυγκομιδὴ ἐκ τῶν ἀγρῶν ἐς τὰ ἄστυ, ἢ ἐχ' ἥσαντες ἐπελθόντας, οἰκίῳν δ' ἐχ' ὑπαρχουσῶν, ἀλλ' ἐν καλύβαις πνηθεῖς ὥρα ἔτες Δαίωμέναν, ὁ φθόρος ἐγένετο ἐν κόσμῳ, ἀλλὰ ἢ νεκροὶ ἐπ' ἀμύλοις ἐκέντο.* This is to say : Besides the present Affliction, the Reception of the Countrey People, and of their Substance into the City, oppress'd both the Citizens, and much more the People themselves, that thus came in : For, having no Houses, and dwelling at that time of the Year (for it was in the Summer) in stifling Booths, the Mortality was now without all Form, and dying Men lay tumbling, one upon another, in the Streets. And Tit. Livius describes the like Event in almost the same Colours. *Grave tempus, says he, & fortè annus pestilens erat urbi, agrisque, nec hominibus magis, quàm pecori : & auxere vim morbi terrores populationis, pecoribus agrestibusque in urbem receptis :* Ea

They came, and brought with them additional Flame :
Men

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Ea colluviomixtorum omnis generis animantum, & odore insolito urbanos, & agrestem confertum in arcta tecta, æstu, ac vigiliis angebat, ministeriaque invicem, ac contagio ipsa vulgabat morbos. lib. 3.

1232. And brought with them additional Flame:] It is highly probable, that the great Concourse of Countrey People, that flock'd into the City, for fear of the Lacedemonians, who had then invaded Attica, and were putting all to Fire and Sword, was the chief Cause of this Plague; and that what Lucretius related before of the City of Athens, was spoken by a certain Way of Anticipation, which is not unfrequent with Poets; as if he had consider'd with himself, that he should not have explain'd the Matter equal to its Dignity, if, setting less by the Metropolis than the whole Province, he had begun his Narration of this Disease by the Countrey. The Testimony of Thucydides, from whom our Author has taken this Description, is alone sufficient to justify this Opinion; which nevertheless may be confirm'd by other undeniable Proofs. For, in the first Place, the Athenians would otherwise have been very injurious to their Prince Pericles, whom, as Plutarch tells us in his Life, they accus'd of having been the Cause of the Plague, by admitting into the City, and in the Heat of Summer, the great multitude of Peasants, and other Countrey People; where they, who had been accustom'd to Labour, and Living in the open Air, led lazy and idle Lives, and were crowded and shut up together in narrow and stifling Habitations: Of all which he had been the Occasion, who, during the War, had

receiv'd those, who had fled from the Enemy, within the Walls of the City, where he took Care to find them no manner of Employment, but suffer'd them, like brute Beasts, inclos'd in narrow Grounds, mutually to infect one another; and allow'd them no change of Air, or scarce the liberty of Breathing. Thus Plutarch: Now let it be even granted, that the Athenians were in the Wrong as to the Cause of this Plague; yet they had no Pretence of Reason to lay the Blame on Pericles, if Athens was afflicted with that Pestilence, before the Peasants, and other Inhabitants of the Countrey fled thither: But they were not mistaken in believing that the Plague had invaded the City by the means of this new Increase of Dwellers: for sultry Heat, and an impure, corrupted Air may favour and promote a Plague; but are altogether incapable of first kindling and introducing a Pestilence. Diodorus Siculus, tho' he adhere, too obstinately indeed, to the then commonly receiv'd Opinion of the ambient Air, yet favours our Assertion concerning the Contagion, by means of the Countrey People that flock'd into Athens: for, speaking of this Plague, he says: That the great Multitude of all manner of People, who, out of Fear, were fled from the Countrey into the City, where, by reason of the Narrowness of the Place, they were promiscuously, and without any Order, crowded together, not without good Cause, fell into Diseases: for, breathing nothing but noisome Stenches, that were occasion'd by Filth and Nastiness, and the Air besides being grown sultry, and almost suffocated

Men flock'd from ev'ry Part, all Places fill'd:
Where CROWDS were great, by HEAPS the SICK-
NESS kill'd:

1235 Some in the STREETS, some near the FOUNTAINS lay,
Which quench'd their FLAME, but wash'd their SOUL
away;

And some in publick, half alive, half dead,
With filthy Cov'rings o'er their Members spread,
Did

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cated by the Heat of the Season, they receiv'd within their Bowels the contagious Venom. Thus we see what is the chief Cause of Plagues, and from whence this of Athens took its Origine. Even Lucretius himself, whatever he said, to the contrary, of the Air, in the beginning of this Narration, yet in this Place he seems to own, that the Plague proceeded chiefly from the Contagion, which the Countrey People brought into the City: His Words are as follows:

Nec minimum partim ex agris
ægroris in urbem
Confluxit, languens quem con-
tulit agricolarum
Copia, conveniens ex omni mor-
bida parte.

There is therefore no Reason to dispute, for the Future, the most ancient Prerogative and Efficacy of Contagion, in all Plagues; but chiefly, not in this most memorable Plague of Athens.

1234. By Heaps the Sicknes kill'd:] Thus too the Bishop of Rochester:

There was no Number now of
Death:
The Sisters scarce stood still
themselves to breathe:

The Sisters now, quite weary'd
In cutting single Thred,
Began at once to part whole
Looms:

One Stroke did give whole
Houses Dooms.

Plague of Athens, Stan. 21.

1235. Some in the Streets, &c.] In like manner Thucydides: Καὶ ἐν ταῖς ὁδοῖς ἐκαλινδύνον, ἢ δὲ τὰς κρήνας ἀπάσας ἡμι-
θνήτες, τῇ τῆ ὕδατος ἐπιθυμίᾳ.
That is to say: And they lay half-dead in the Ways, and about every Conduit, thro' Desire of Water. The greatest Relief of an inflam'd Heart, is without doubt, to breathe in a cool and pure Air: but the Heart is always inflam'd in a burning Fever, with which the Athenians were then afflicted: And hence proceeded that implacable Thirst; which made them make what haste they could to the Fountains: but some of them, thro' Weakness, fainted and fell down by the Way; while others, who had more Strength, lay near the Fountains, suffocated with the great Plenty of Water, they had pour'd down into their burning Entrails. Now the Fountain Callirhoes, that without the Walls, broke out in seven Streams, and was convey'd into Athens by as many Pipes, supply'd with Water the upper Part of the City: In the lower Part of which, towards the Piræus, there were no Fountains, but only Wells, as has been said already.

1237. And some, &c.] Lucretius omits nothing, that may create Horrour, and provoke Commiseration in the Minds of his Readers. To this End, he now exposes to their Eyes the
Streets

Did lie, and rot ; the SKIN, the poor Remains
 1240 Of all the FLESH, the starting Bones contains,
 All cover'd o'er with ULCERS, vex'd with PAINS.

DEATH now had fill'd the TEMPLES of the GODS :
 The PRIESTS themselves, not BEASTS, are th' AL-
 TAR'S Loads :

Now no RELIGION, now no GODS were fear'd ;
 1245 Greater than all the present PLAGUE appear'd :

All

NOTES.

Streets of Athens, thick-strow'd
 with dead and dying Bodies,
 half-naked, and half-cover'd
 with filthy Weeds, and wallow-
 ing, nay, almost bury'd, in their
 own Corruption.

1242. Death now, &c.] Here
 the Poet teaches, that Necessity
 had reduc'd the Athenians to
 such hard Extremities, that the
 Ædiles, whose Office it was to
 take Care of the Temples, had
 permitted those that fled into the
 City, to take up their Abodes in
 those holy Places ; where, they
 built Tents for themselves and
 Families, and perhaps too for
 the Cattel they brought with
 them. This Profanation of sa-
 cred Things, and contempt of
 all Religion, proceeded from the
 highest Desperation, if we may
 give Credit to Thucydides, who
 relates it as follows: *Τὰ τὲ ἱερά,*
ἐν οἷς ἐσκήνουν, νεκρῶν πλεῖα ἦν,
αὐτῶ ἐναποθνησκόντων, ὑπερβιαζο-
μένους δὲ τῶ κακῷ, οἱ ἄνθρωποι ἐκ
ἔχοντες ὅτι γένωντ' ἐς ὀλιωρίαν
ἐλεάποντο ἢ ἱερῶν ἢ ὁσίων ὁμοίως.
 i. e. The Temples also, where
 they dwelt in Tents, were all full
 of the Dead, that dy'd within
 them : for, oppress'd with the
 Violence of the Calamity, and
 not knowing what to do, Men
 grew careless of holy and pro-
 phane Things alike.

1243. The Priests them-
 selves, &c.] For this Thought
 our Translatour is not so much
 oblig'd to his Authour, as to the
 Bishop of Rochester, who, on this

Particular, paraphrases as fol-
 lows :

The Gods are call'd upon in
 vain :
 The Gods gave no Release unto
 their Pain :
 The Gods to fear ev'n for them-
 selves began :
 For now the Sick into the Tem-
 ples came,
 And with them brought more
 than a holy Flame,
 There, at the Altars, made
 their Pray'r :
 They sacrific'd, and dy'd too,
 there :
 A Sacrifice not seen before ;
 That Heaven, us'd but to the
 Gore
 Of Lambs or Bulls, should
 now
 Loaded with Priests see its own
 Altars too.

Plague of Athens, Stan. 29,

1244. Now no Religion, &c.]
 Thucydides, after having ac-
 quainted us, that the great Li-
 centiousness, which was practic'd
 in the City, proceeded, and be-
 gan at first from this Disease,
 adds immediately : That what
 any Man knew to be delightful,
 and conducive to Pleasure, that
 was made both profitable and
 honourable : Neither the Fear of
 the Gods, says he, nor Laws of
 Men aw'd any Man : not the
 former, because they concluded
 it was alike to worship, or not to
 worship, seeing that they all a-

All LAWS of BURIAL lost, and all confus'd :
No solemn FIRES, no decent ORDER us'd ;

But

NOTES.

like perish'd : not the later, because no Man expected that his Life would last, till he receiv'd Punishment of his Crimes by Judgment : But they thought there was now, hanging over their Heads, some far greater Judgment decreed against them ; and, before it fell upon them, they thought to enjoy some little Part of their Lives. *Ὅτι δ' ἡδε ἔτι ἰδὺν, καὶ πανταχόθεν τὸ ἐς αὐτὸ κερδαλέον, τῷτο καὶ καλὸν καὶ χρήσιμον καλεῖται, Θεῶν δ' φόβῳ, ἢ ἀνθρώπων νόμῳ, εἰδὲς ἀπείργει, τὸ μὴ κείνοί τις ἐν ὁμοίῳ σέβειν καὶ μὴ, ἐκ τῆ πάντας ὁρᾶν ἐν ἴσῳ ἀποκυμένους· τῶν δ' ἀμαρτημάτων εἰδὲς ἐλπίζων μέχει τῆ δίκην γενέσθαι βίης ἀντὶ τιμωρίαν ἀντιδέναι· πολὺ δ' μείζω τ' ἰδὺν κατεψυγισμένῳ σφῶν ἐπικρεμασθῆναι, ἢν πρὶν ἐμπροσθεῖν, εἰχὸς εἶναι τῆ βίης τι ἀπολαύσαι.* Thus Thucydides : Upon which Passage of that Historian the Bishop of Rochester finely Paraphrases ; and concludes his Poem :

But what, Great Gods ! was worst of all,
Hell forth its Magazines of Lusts did call ;
Nor would it be content
With the thick Troops of Souls were thither sent ;
Into the upper World it went :
Such Guilt, such Wickedness,
Such Irreligion did increase,
That the few Good, who did survive,
Were angry with the Plague for suffering them to live,
More for the Living, than the Dead, did grieve :

Some rob'd the very Dead,
Tho' sure to be infected e'er they fled ;
Tho' in the very Act sure to be punished :
Some, nor the Shrines, nor Temples, spar'd,
Nor Gods, nor Heav'ns they fear'd,
Tho' such Examples of their Pow'r appear'd :
Virtue was now esteem'd an empty Name ;
And Honesty the foolish Voice of Fame :
For, having pass'd those tort'ring Flames before,
They thought the Punishment already o'er ;
Thought Heav'n could have no worse in Store :
Here having felt one Hell, they thought there was no more.

Plague of Athens, Stan. 31.

1246. All Laws of Burial, &c] In these twelve last Verses the Poet relates, That the Athenians were not content with polluting their Holy Places with dead Bodies, but transgress'd likewise all their Laws concerning Funerals, which they had till then observ'd, and bury'd their Dead, as they could, where-ever they found Room. Thus too Thucydides. *Νόμοι τε πάντες συνελάχθησαν, οἷς ἐχρῶντο πρότερον, καὶ τὰς ταφὰς· ἐθαπλον δ' ὥς ἐκαστὸς ἰδύνατο.* Now by the unanimous Consent of all Authours, the Athenians were of all People the most ceremonious in the Funerals of their Dead, whom they honour'd even to the highest Superstition. If any one neglected to pay the Rites of Funeral to those

those who were slain in War, he was punish'd with Death : And the Pomp and Expence of Funerals grew at length to such Excess among them, that Solon was forc'd to put a stop to it by Laws : but when this Plague was raging at Athens, no funeral Rites were observ'd : For, as the Historian, from whom our Poet has taken this Passage, relates ; Many, for want of Things necessary, after so many Deaths before, were forc'd to become impudent in the Funerals of their Friends : For, when one had made a funeral Pile, another, getting before him, would throw on his Dead, and set it on Fire : And when one was burning, others would come, and, having cast upon it the Dead they brought,

go their Way again. Καὶ πολλοὶ ἐς ἀναρχίας θήκας ἐπὶ τὸ σπένει τῶν ἐπιηδείων, ἀφ' τὸ συχνὲς ἤδη περὶ θανάτου σφίσιν, ἐπὶ πυρὰς καὶ ἀμοσσίας, φθάσαι-
τες τὰς νοσήσαντας, οἱ μὲν ἐπι-
θέντες τ' ἐαυτῶν νεκρὸν, ὑψήπιον·
οἱ δὲ καομένην ἄλλα, ἀνωθεν ἐπι-
βαλόντες ὃν φέροιεν, ἀπῆσαν·
Thucyd. But this Calamity of the Athenians will more visibly appear, by giving at large the Laws and Ceremonies, that they thought themselves religiously bound to observe in the Sepulture of their Dead ; and which are recorded by Nardius in the following, no less learned than accurate, Animadversion on this Passage of our Authour.

Animadversion of JOANNES NARDIUS, concerning the Funerals of the Athenians.



CICERO, in his Oration for Flaccus, acquaints us, That Humanity, Learning, Religion, Laws, civil Societies, and the Use of Corn, began first among the Athenians, and from them were distributed over the whole Earth : Hence Lucretius says of them.

Et recreaverunt vitam, legesque rogârunt. lib. 6. v. 3.

But nothing seems to have been more antiently practic'd among them, or more religiously observ'd, than the paying the just Dues of Funeral to their Dead ; especially to those, who had been slain in fighting for their Countrey : Of this
we

we have a famous Example, recorded by Xenophon, lib. 1. *Ἐμνηνικῶν*, and by Valerius Maximus, who tell us, that the Athenians condemn'd, and put to Death, ten of their Captains, who return'd to Athens after a great Victory they had gain'd at Sea over the Lacedemonians, only because they had not paid the last Duties to the dead Bodies of those that had been kill'd in the Engagement, even tho' they had this to plead in their Defence, that the tempestuous Weather had render'd it impossible: *Decem Imperatores suos, & quidem à pulcherrima victoria venientes, capitali judicio exceptos necârunt, quod militum corpora, licet, sævitia maris interpellante, sepulturæ mandare non potuissent, sed in fluctus, necessitate adacti, projecissent, Valer. Max. lib. 9. cap. 8.* Deterr'd by this Severity, Chabrias, who commanded the Athenian Fleet, was more wary: For he, having defeated and put to flight the Fleet of the Lacedemonians at the Island Naxos, instead of pursuing the routed Enemy, minded only to gather up the dead Bodies of the Slain; and, fearing the Superstition of the People, chose rather, says Diodorus Siculus, lib. 15. to let the Enemies of the Republick escape, than that their dead Friends should be depriv'd of the Rites of Funeral; otherwise he might easily have destroy'd the whole naval Force of the Lacedemonians. Nicias, the great General of the Athenians, commanded his whole Army to halt, only to bury two of his Soldiers. Isocrates in Panegy. relates, That Adrastus, King of Argos, having been unsuccessful in a War against the Thebans, and not being able to carry off the dead Bodies of the Slain, besought the Athenians, and their King Theseus, to commiserate the publick Calamity of the Argives, and to assist them to compel the Thebans, to allow the Ceremonies of Sepulture, to those who had been kill'd in the Battel: This the Athenians deem'd a just Cause of War, and the Success seem'd to justify their Opinion: For, taking up Arms against the Thebans on no other Pretence but this, they defeated them, and would hearken to Peace on no Terms whatever, till the Thebans, by way of Preliminary, had paid the due Rites of Sepulture to the slain Argives. Nor may we forget the Piety of Cimon, who, that he might bury his Father, who was dead in Prison, submitted to be a Prisoner himself, and redeem'd the Body at the Price of his own Liberty.

But they extended this Piety not only to those, who had sacrific'd their Blood in Defence of the publick Safety, but likewise to their Kindred, and Men of the meanest Condition : whose Relations the Demarchus, or Chief of the People, could oblige to bury the dead Body, by laying a heavy Fine on those that neglected to do so within a certain time : That Magistrate had likewise a Power to limit and fix the Expence of a Funeral, as also to contract himself for it with the publick Undertakers. Eustathius, in Com. Il. ad calcem, celebrates Pisistratus, for having always two or three Servants attending him, whose whole Business it was to carry Money for him to bestow on the Funerals of the Poor. The Charity of Cimon to the dead Poor, who left not enough to bury them, and whom he interr'd at his own Expence, is likewise extoll'd by Æmilius Probus : and Plutarch, in his Life, records of him, that, having with great Care and Trouble got together the Bones of Theseus, he brought them to Athens. Nor may we forget a signal Office of Piety, mention'd by Demosthenes, advers. Macartar. and enjoin'd by an Attick Law, which commanded every Passenger, who happen'd to see upon the Road a dead Body, tho' of a Person unknown to him, to throw at least three Handfuls of Earth on the Face of the Defunct for his Sepulture, since at that time he could not have the Means of burying him otherwise. This is attested likewise by Ælian. Var. Hist. lib. 5. and by Phocylides, Moschus, Sophocles, and Acron. And this Custom was so generally receiv'd, and deem'd so indispensibly necessary, that it was expected even of those, who were going on Business that requir'd the greatest Haste, as Quintilian says, lib. 1. Decad. 5. and Horace, Carm. lib. 1. Od. 28. alludes to it in these express Words of Archytas the Philosopher to the Seaman :

At tu, nauta, vagæ ne parce malignus arenæ,

Offibus & capiti inhumato

Particulam dare. —————

Quanquam festinas, non est mora longa, licebit

Injecto ter pulvere curras.

Which Creech thus interprets,

But Seaman, pray be just ; put near the Land ;

Bestow a Grave, and hide my Limbs in Sand.

Tho'

Tho' hasty now, driv'n by a prosp'rous Gale,
'Tis quickly done, thrice throw the Sand; and sail.

Nor, as the Scholiast on the Antig. of Sophocles informs us, were they permitted to throw Clods of Earth, but what they call'd *χόος*, Mould, or crumbled Earth: And this Office they call'd *ἐπιβάλλειν γῆν, or χόνειν ταλύνας*. They fear'd, perhaps, that if they had thrown solid Clods of Earth, they would have lain heavy on the dead Body. Let this suffice for the Piety of the Athenians towards the Dead: I will now, that I may not seem tedious to the Reader, nor create in him a suspicion of Truth in a Matter so very obscure, select only the most remarkable Ceremonies, which they observ'd in Funerals, as I find them recorded in the most authentick Authours.

First then, to begin my intended Discourse with what was practic'd in the last Agonies of the dying Person; I find in Diodorus Siculus and Valerius Maximus, that when the sick Person perceiv'd his End draw nigh, he took a Ring off his Finger, and gave it to the Stander by, who was dearest to him: Historians report this to have been done by Alexander. Then pronouncing these last Words, *Vive ac vale*, (vide Servium in *Æneid.* 5.) he breath'd out his Soul, embracing and kissing his best-belov'd. For they believ'd the Mouth to be the Passage thro' which the Soul went out of the Body, and therefore endeavour'd to catch it as it fled, by holding their Mouth open close to that of the Person expiring. Thus Antigone in Euripides, in *Phœniss.* says: O my dearest, and my best belov'd, I will put thy Mouth to mine. After whose Example, perhaps, Anna in Virgil *Æn.* 4. v. 684.

———— Et extremus si quis super halitus errat,
Ore legam.————

And Livia in the Epicedium of Albinovanus:

Sospite te, saltem moriar, Nero: tu mea condas
Lumina, & excipias hanc animam ore pio.

Hence, at Rome, as we learn from Seneca in *Epist.* 30. and from the Tragedian of that Name in *Herc. Fur.* it was proverbially said of the Old, who were worn out with Age,
that

that their Soul was in their Mouth : Thus the Romans deriv'd this Credulity from the Greeks : And Aristotle in his Treatise de Insp. & Resp. says, That Inspiration is the Protasis, and Expiration the Catastrophe of Life.

But the Wishes of the above-mention'd Livia, suggest to us another Office that was apply'd to dying Persons, and which the Greeks, in their Language, call'd καθαιρεῖν τὰς ὀφθαλμούς, the Latines, condere, or tegere oculos ; to close their Eyes. This was the Duty of the nearest Relation, or of the dearest Friend, who immediately clos'd the Eyelids of his departed Relation or Friend : For, as Pliny teaches, lib. 11. cap. 37. they held it a Crime against the Gods to see the Eyes of a dead Person. And that the Custom, of which we are speaking, was religiously observ'd, as a pious Office, that ought not to be neglected, we have the Testimony of many of the Antients : particularly of Euripides in Hecuba, and in Phœnissa, of Homer. Odyss. 10. and Iliad. 1. and of Plato in Socr. While these Things were doing, all who were present, call'd with a loud Voice, and by his own Name, the Person, who was dead, and immediately with Wailings and Tears ran to embrace the Corps : This we learn from Servius on the 4th Æneid, and from Propertius, lib. 4. Eleg. 6. For, as Alcinous, de doct. Plat. cap. 12. says, he, who with dry Eyes, can behold the Death of his Relations and Friends, has a Mind insensible, and void of all Affection. Hir'd Women attended to take Care of the Body, and these shut the Mouth of the dead Person, while the Body was yet warm : Yet Crito perform'd the last Offices to the condemn'd Socrates, that Women, by their unavailing Laments, might not shake the Constancy of his undaunted Soul. Then they laid out the other Members, and wash'd the Corps with warm Water : because, says Cicero, lib. 1. de Leg. they believ'd the vital Spirit to be shut out, and often to deceive them ; for which reason, they were wont to wash the Bodies of their Dead with warm Water : In the next Place they anointed the Body with Oil, if the Person were free, and not of servile Condition : For Uction was forbid to Slaves by the Laws of Solon ; who likewise prescrib'd Bounds to Tears and Mourning ; but to publick indeed, rather than to private : Even he himself, as Stobæus ; Serm. 276. witnesses, wept for the Loss of his Son ; and when it was told him, That Weeping would avail him nothing : I know it well, said he, and for that very Reason I weep. And indeed,

Quis matrem, nisi mentis inops, in funere nati
Flere vetat ?

says Ovid, de Remed. Amor. Especially when, as the Custom was, they plac'd the Child, after it was wash'd and anointed, on the Knees of the sorrowful Mother, who, taking it into her Lap, and cherishing the cold Limbs in her trembling Bosom, cloath'd it at length in its funeral Attire ; as we learn from Lucian, de luctu, and from Herodotus Mus 5. The Romans call'd the Mother of a dead Child, funera Mater, and that too very properly, since the whole Funeral, the Loss and the Grief were chiefly hers : This is attested by Pliny, lib. 11. cap. 45. and by Servius in Eclog. 6. Confirm'd likewise by the Mother of Euryalus, who in Virg. Æn. 9. hearing of the Death of her Son, cries out in the Bitterness of Anguish :

————— Nec te tua funera mater
Produxi, pressive oculos, aut vulnera lavi,
Veste regens. —————

But by the Laws of the twelve Tables, it was forbid among the Romans, to take into their Laps, the Body of any, who were kill'd with Lightning ; or to allow to such the accustomed Rites of Funeral ; because, according to the Doctrine of the Greeks, they were esteem'd holy, and worthy of Divine Honour : of which we have spoken above, p. 629. Vide etiam Artemid. lib. 2. cap. 8.

The funeral Vestment, or Shrowd, was made of fine, white Linnen, and they call'd it *λάνη σόλη*. In weaving one of these, the chaste Penelope employ'd many Years, to get rid of her importunate Wooers, to whom she pretended she was making that Winding Sheet for her Husband Ulysses. Thus Homer, Odyss. B. Nor in the Camp of the Greeks did any take Offence at Hippodamia and Diomedea, the last of whom Patroclus, when alive, lov'd even to Madness ; and who, both of them, adorn'd his Funeral with the richest of Vestments, as Dictys Cretensis has it in lib. 4. Nor can we doubt, but that, in Process of Time, when Corruption of Manners had crept in among the Athenians, even they too made use of costly Dresses for their Dead : We read in Ælian Var. Hist. cap. 16. and in Diogenes Laertius

Laertius in vit. Socr. that Apollodorus offer'd Socrates, after this Philosopher had swallow'd the poisonous Draught, and was in his last Agony of Life, a white Vestment and Robe : and Plutarch, in vita Lylandri, tells us, that Philocles, the Prætor of Athens, after having wash'd his Body, put on his richest Robes, and, thus attir'd, underwent with an undaunted Mind the Death to which his Conquerour Lysander had doom'd him. Certain it is that they adorn'd their Dead with Crowns and Garlands, made of the Leaves of Olive ; and sometimes of Parsley, as Suidas reports, that Dares deliver'd in his Book de Certaminibus : and Lucian de Luctu adds, that they stuck in among the Leaves the Flowers that the Season afforded : This Garland was put on by the nearest Relation : and Plutarch relates of Pericles, that, tho' he strove to retain his Gravity, and labour'd not to discover his inward Anguish, yet he could not refrain from Tears, when he crown'd with this funeral Garland the Head of his dead Son Parolus. Lastly, they put into the Mouth of the deceas'd two pieces of Money, of the value of one Penny each, to pay his Passage over the River Styx : Thus the Expositour on the Frogs of Aristophanes, who says besides, that this Freight-money was in their Mother-Tongue call'd *Δανάκη* ; but the Atticks call'd it *Κάραδος*, and the Latines Naulum.

These Ceremonies being thus perform'd to the Body, it then was, by the permission of a Law of Solon's, plac'd any where within the Doors of the House : and this they call'd the Collocation of the Body : but the same Law commanded, that it should be carry'd out to Burial the next Morning after the Collocation, and that too before Day-light. This Law was expir'd, or at least was grown out of use, in the Time of Demetrius Phalereus : and tho' it was then renew'd, it hinder'd them not from keeping the Body in the House, as the Romans likewise did, for the space of seven intire Days : during which time Frankincense, Storax, and other Perfumes were continually burning on a little Altar, that was plac'd by the Feet of the Corps. And this Custom of keeping the Body thus long was observ'd for this reason, to wit, because the Presence of the Deceas'd alleviated the Sorrow of the Mourners, and accustom'd their Mind by degrees to part for good and all with what they so dearly lov'd. For this Reason the Greeks, when they were before Troy, bury'd not the Body of Achilles, till after they had kept it seventeen whole Days.

Besides: Those who perform'd the meanest Offices to dead Bodies, as the washing and rubbing them with Oils and Ointments, and whom the Greeks call'd *Καταγεωταί*, and *Νεκροθάπται*, and the Latines, Pollinctores, were, as P. Vict. lib. 2. var. lect. cap. 7. and Lilius Gyraldus observe, held in such Abomination, that they were not permitted to have Houses within the Walls of the City: And Seneca, lib. 6. de Benefic. says, that Demades condemn'd at Athens a Person who sold Necessaries for Funerals; because it was evident, that he intended, and wish'd to gain by his Business, which nevertheless he could not do without the Death of many.

There were several Tokens, that gave Notice of a House, in which there was a dead Body: before the Door they plac'd Boughs of Cypress, and a large gor-belly'd earthen Pot, fill'd with holy Water, and which was commonly call'd *Ἀρδάνιον γάσα*, but by Aristophanes, *ὄσρακον*: and that Water was always brought from another House: The Hair likewise of the Deceas'd was hung over the Threshold of the Door: And the reason of all this was, that none might be polluted, by going into the House unawares.

On these Occasions the Greek Matrons laid aside their usual Apparel, and mourn'd generally in black, tho' sometimes in white: neglecting to set themselves off with Ornaments, and despising their accustom'd Trim: Their mourning Garment was, by the Decree of Solon, call'd *ἱμάτιον*. They sate by the Corps with dejected Looks, and weeping around the Bier, on which sate the Keeper of the Corse, [capularis custos] some very old Man or Woman, that kept always next the Deceas'd: The Companions too of the dead Person stood around his Body, overwhelm'd with Grief, together with weeping Virgins, who often beat their Breasts with their Hands: And those of the weaker Sex frequently tore off their Hair for Grief: For it was forbid to cut it quite off, except at the Pile or Tomb. It was an antient Custom too in Mourning to take the Hair off their Eye-brows, and to do all things that might testifie an Irksomeness of Life, and betray an Anguish of Mind. They scarce eat at all; what Nourishment they took, was of the coarsest Fare: Nor is it improbable, that the Cups they drank out of were black: as was the Custom at Rome: where they were made of Earth that came from Polentia. See Martial, lib. 14. Epig. 157. and Euripides in Troad.

When

When the seventh Day approach'd, the Body was, by the Friends of the Deceas'd, laid on a high Bier, and plac'd with the Feet next the Door ; which last Custom the Scholiast on the sixth Iliad observes, was not without Mystery : For, says he, the Dead were laid in that manner, to signify, that they were never more to return to the House again : But Pliny, lib. 7. cap. 8. gives a better reason, and says, that as by the Decrees of Nature Man comes into the World with his Head foremost, so he is carry'd to his Grave with his Feet in that manner. This Ceremony was call'd *Πρόθεσις*, i. e. Collocatio, and was observ'd for this Reason, that by thus exposing the Body, it might be seen whether any Violence had been offer'd to it : And tho' it was indulg'd by the Attick Laws, that the Body might be plac'd in any part of the House, yet this Collocation, as they call'd it, was generally made in the Vestibulum, Porch, or Entry, and always with the Feet towards the Door : a Custom frequent enough in our Days. I may not omit their foolish Custom of driving away the Flies ; and into which they were led, perhaps, by the Example of the officious Thetis. See Hom. Iliad. 8. Socrates in Plato, in Minoe, takes notice of their observing an antient Attick Law concerning the Inferiæ, or Sacrifices to the Infernal Gods ; by which Law it was injoin'd, not to carry the Body out of the House, till the Victims were slain ; no doubt for the Expiation of the Deceas'd. And since we are speaking of Laws, I will mention the Ordinance of Hippias the Tyrant, who commanded, says Aristotle in OEconom. that for each dead Person should be paid to the Chief Priests of the Temple of Minerva, which was in the Tower of Athens, two Sextaries of Barley, as many of Wheat, and one Penny in Money. These things compleated the domestick Mourning, and the first part of the Funeral ; to which immediately succeeded the second in the following Manner.

According to the Laws of Solon, as Demosthenes affirms, but as Tully, of Demetrius Phalereus, in the Hours of Morning, that preceded Day-light, especially if the Person dy'd an untimely or suddain Death, the Body was carry'd out of the House : This they call'd *ἡμέρας ἀρπαγὴν*, *diei raptum*, as if the Deceas'd had not expir'd, but had been snatch'd or ravish'd away : or because they thought it not fit, that the Sun should behold so great a Misfortune, and therefore they said, that they, *diem rapuisse*, had ravish'd, had prevented the Day : The Procession began by a long
Row.

Row of Torches, whose Splendour dispell'd the Darknes of the Night: and if the Deceas'd had been kill'd, or had dy'd a violent Death, a Spear was borne before the Body: Hoarse-sounding Trumpets attended, especially at the Funeral of a Military Man, or one who had deserv'd well on account of his signal Services to the Republick; and at the Obsequies of such, the People were summon'd to assist. Then came the *Τυμβαῖοι*, Players on the funeral Pipes, which the Greeks by a Word borrow'd from the Phœnicians, call'd *Γιγρῖαι*, and which, after the Libyan Mood, utter'd a doleful Sound, that excited the hir'd Women to bewail the Dead. These Women the Greeks call'd *Σοφισαὶ θρηνῶν*, the Dissemblers, and the Principals in the Mourning, tho' they shar'd not in the Grief. These the Latines call'd *Præficæ*. The Chief of them was call'd *Ἰνλεμίσεα*, from a sort of Song, which they term'd *Ἰλέμε*, or *Ἰάλεμε*, the Latines, *Lessus*, *Lausus* & *Mortualia*, a funeral Dirge. With these Mercenaries join'd the Virgins and Matrons, that were related to the Deceas'd, with their Hair disshevel'd, and besprinkled with Dust and Ashes, their Face and Bosom bare, beating their Breasts, tearing their Face, and each of them howling rather than yelling and wailing. But let us hear *Bellonius*, an Eye and Ear-witness of the funeral Ceremonies at this Day observ'd in Greece.

The Custom, says he, of bewailing the Dead, which took its Rise from the antient Heathens Howling at Funerals, remains among the Christians, even to this Day. Now the Heathens of old were wont to lament and mourn their Dead for many Days: and Greece still retains this Usage, which it deriv'd from its Ancestours. For in all places, by a certain promiscuous Custom, when any of the Family dies, whether it be the Husband, or any other Relation, for whom, according to the Usage of the Countrey, they are oblig'd to mourn, the Women run up and down the Streets bare-headed, with their Hair disshevel'd, their Bosom naked, and piercing the Air with their loud Shrieks and Yells: rearing likewise the Hair off their Heads, rending their Cheeks, and striking their bare Breasts, sometimes with one Hand, sometimes with the other: with their right Hand they tear the left side of their Body, and with their left, the right: In the same manner too they tear off their Hair, from the left side of their Head with their right Hand, from the Right with their left: And thus by Turns, sometimes scarifying their Cheeks, sometimes beating their Breasts, and sometimes tear-

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ing off their Hair, they perform this Ceremony of Mourning: But this Custom of bewailing the Dead, is permitted only to the Women, of what Rank soever they be: For the Men are not suffer'd to bear a Part in this sort of Mourning. I know all this to be true, not by Hearsay, or the Writings of others, but have often seen it practis'd of late in many Places of Greece: The first Time I was an Eye-witness of it, was in the Month of March, 1547. and at Corcyra anciently, but now call'd Corfu. I had for many Days together, before it was light, heard a great Noise, which at first I took to be the Howling of Dogs, shut up in their Kennels: but at length I got out of my Bed to discover the truth of it, and, to my great Astonishment, found it to be a Company of screaming and howling Women. Now that they may perform this Yelling the better, they agree among themselves on a Time and Place, when and where they may twice a Day mourn and wail the Death of the Deceas'd. Moreover, She among these Women, who has the best Voice, and sings the loudest, begins the Dirge alone, and, in a dissonant Voice from the others, recounts to his Relations and Friends the Praises of the Deceas'd: And if none of the female Relations themselves be capable of performing this Office, they hire another Woman to do it. For in the Towns of Greece there are many Women, whose sole Livelihood it is to wail the Dead: in which they are so artful, that they excite even the unwilling to bear a Part in their Cries and Yellings. And she of all the Women, who excels the rest in reciting the Praises of the Deceas'd, is hir'd the dearest. And the other Women, who assist in the Ceremony, harkening attentively to what she sings, and mixing, with hers, their Sighs and Groans, chaunt out the funeral Dirge, in the same doleful Tune. She too, who with her Nails scratches and tears her Cheeks the most, is wont to receive the greatest Reward. The Virgins, above the rest, gain most Honour by this Dilaceration of the Face. Thus P. Bellonius, lib. 2. de medicato funere, cap. 14.

Some Footsteps of these Dirges are still remaining in Græcia Major, the Custom of lamenting the Dead in Rhyme being not totally abolish'd. A. Santorellus, in his learned *Postpraxis, seu de curando Defuncto*, records a Dirge, still frequently us'd by the Countrey People in Calabria: And Lilius Gyraldus witnesses, that that feminine Custom of Yelling and Screaming, and of tearing their Cheeks and Hair, continu'd among the Sabines in his Days, and almost throughout

throughout all Italy. But no where can we find a more pathetick and moving Dirge than this in our Lucretius :

At jam non domus accipiet te læta, neque uxor
Optima : nec dulces occurrent oscula nati
Præripere, & tacitâ pectus dulcedine tangent :
Non poteris factis tibi fortibus esse, tuisque
Præsidio. Miser, ô miser, omnia ademit
Una dies infesta tibi tot præmia vitæ.

Which Dryden thus interprets :

Alas! Thou'rt snatch'd from all thy Household Joys,
From thy chaste Wife, and thy dear prattling Boys ;
Whose little Arms about thy Legs were cast ;
And climbing for a Kiss, prevent their Mothers haste ;
Inspiring secret Pleasure thro' thy Breast :
All these shall be no more : Thy Friends, oppress'd,
Thy Care and Courage now no more shall free :
Ah Wretch ! they cry : ah ! miserable thee !
One woeful Day sweeps Children, Friends, and Wife ;
And all the brittle Blessings of thy Life.

Solon, as Cicero, lib. 2. de Leg. and Plutarch in his Life, inform us, forbid indeed by a Law this dilaceration of the Cheeks, and beating of the Breasts ; which last they call'd *σεπνοτυπία*. the People nevertheless could not be prevail'd on to discontinue that Custom : Nor, as the above-cited Bellonius relates, were the Venetians of late Days more successful, in the like Injunctions they gave to the Countreys of Greece, that are subject to their Obedience. The Reason, why the Antients adher'd thus obstinately to this Custom, was, because they credulously believ'd, that the Manes, or Ghosts of the Dead, were pleas'd and satisfi'd with Blood and Milk : Therefore, says Servius, the Women, who assist at Funerals, beat their Breasts, that they may force out the Milk, and all scarify their Flesh, to make themselves bleed. But because a vast Concourse of Women, of all Conditions, were wont to flock to the funeral House, it was forbid by a Law, for any Woman to come to a Funeral, except such as were Relations of the Dead, and sixty Years of Age : Thus the great Resort of Men and Women was taken away to lessen the Lamentation. For the Men too flock'd in Crowds to Funerals :
and

and therefore Pittacus, as Cicero, 2. de Legib. teaches, forbid all manner of Persons to attend Burials, except the Kindred of the Deceas'd : which Sanction Aristotle, in Eth. 9. cap. 11. tells us, was continu'd, and in use, in his Days. But it is not certain, whether besides the Relations, who, clad in Black, and with Veils over their Heads, march'd in Order before the Women, the Friends likewise, and all who had at any time belong'd to the Family of the Deceas'd, as also the Masters of Defence, the Players and Dancers, the Slaves manumitted by Will, and those whom the Deceas'd had made free before his Death, the Bearers of the Beds, Gifts, Garlands, Trophies, and waxen Images, together with the Licitors, and Servants of the Senate, which was the Custom at Rome, made part of the funeral Procession : But this is certain, that the Magistracy of Athens sometimes honour'd with their Presence the Funerals of the considerable Citizens ; on account of whose Death they sometimes too very unseasonably prorogu'd the Courts of Justice : And Solon, in Tzetzes, hearing that the whole City attended the Funeral of a young Man, deceiv'd by the Cunning of his Friend Thales, immediately concluded it to be his own Son, whom they were attending to the Grave. The Friends and Relations carry'd, on their Shoulders, the Bier ; of which there were two sorts in Use among the People of Substance : The one was call'd *Δέχων*, the other *Κλίνη*. The Distinction was only in the size of them ; and consequently in the Number of the Bearers : The *Δέχων* was the largest, and carry'd by an uncertain Number of Bearers, according to its size : The *Κλίνη* always by six, or eight ; whence it was likewise call'd *ἑξαπόροσ*, or *ὀκτεπόροσ*. And a Parcel of young Men, chosen by the People, carry'd the Bier of Timoleon, says Plutarch in his Life.

The funeral Pomp proceeded thro' the chief Streets of the City, till it came to the Forum, or Market-Place, where the Bier was set down, and an Oration pronounc'd in Praise of the Deceas'd : This Custom, as we learn from Anaximenes the Oratour in Plutarch, in Vita Solonis, was first instituted by Solon ; and, being in Process of time discontinu'd, was again reviv'd, especially about the Time, when the Greeks, at the Passes of Thermopylæ, overthrew the Barbarians, who had invaded their Countrey. When the Panegyrick was ended, the Procession mov'd again in the same Order, and went to the Place of Sepulture : which Sepulture was not nevertheless perform'd always in the same Place, nor after

Plutarch in his Life, is remaining in the Phalerean Port ; which Tomb is said to have been erected at the Expence of the Publick, he having not left behind him enough to defray the Charges of his Funeral. And all who were slain fighting for their Countrey, either in Engagements at Sea, or Battels at Land, had Monuments set over their Graves ; those only excepted, who fell at the Battel of Marathon, where, says Herodotus, lib. 6. there were kill'd of the Persians about six thousand three hundred, and of the Athenians only one hundred ninety two : And to these, in Honour of their Bravery, were erected Sepulchres in the Place where they were kill'd : but all the others are said to have been bury'd in the Way that leads to the Academy. Yet in great Slaughters, the Republick of Athens, that they might not be thought to fall off from their wonted Piety and Gratitude, took care that the common Soldiers should be bury'd at least promiscuously, one with another, in the following manner, as it is recorded by Thucydides : Three Days before the Obsequies were to be perform'd, they built a Shed with Boards, into which they brought the Bones ; and every one was allow'd to bring thither whatever he thought fit of what his Friend had left behind him : When the Funeral Procession was made, the several Coffins that contain'd the Bones of each Tribe were carry'd in a particular Cart by themselves : and one Bier besides, with Coffins quite empty, was carry'd for those whose Bodies were not found among the Slain. Every Man that pleas'd, whether a Citizen or a Stranger, attended the Funeral, and some Women, who were related to the Deceas'd, went weeping, and bewailing the Dead. The Bones were carry'd to a publick Sepulchre in the Suburbs of Athens, near the Tomb of Callisthus. Let this suffice for publick Sepulchres. But private Families had Vaults, in which they were bury'd, in their own Land, and on the utmost Borders of it : And by this Argument Marcellinus proves the Relation there was between Thucydides and Cimon : and it was deem'd dishonourable not to be laid in the Sepulchre of their Ancestours : But at Athens the Bodies of Criminals were projected, as they call'd it, thrown in a certain Place, where they lay expos'd above Ground, nor was it permitted, even to the Sons of such as had been executed, to bury them : The like Treatment too was given to their Bodies, who, for Crimes discover'd after their Death, were condemn'd to be dug out of their Graves. Plutarch, in the
Lives

Lives of the ten Oratours, mentions a Decree of the Athenians, by which it was forbid to bury, neither in Athens, or within the Limits of its Jurisdiction, the Bodies of Archeptolemus and Antiphon, who were convicted of Conspiracy against the Government: And the like Fate, says the same Authour, in the Place abovesaid, would have happen'd to the Oratour Hyperides, if his Kinsman Alphenus had not burnt his Body, that was given him by Philopites the Physician, and brought his Bones to Athens, contrary to the Decrees, as well of the Athenians, as Macedonians: for he was not only banish'd, but forbid likewise to be bury'd in his own Countrey. And the Friends of Themistocles did him the like good Office, says Æmilius Probus in his Life; for they bury'd his Bones privately, which was forbid to be done at all by the Laws, because he was guilty of Treason: And Plutarch, in the Life of Phocion, takes notice, that his Enemies commanded his Body should be thrown out of the Borders of the Attick Territories, and that no Athenian should presume to set fire to his funeral Pile: And for this Reason the People conceiv'd such a Hatred against him, that no Man, who was free, durst to bury Phocion, inso-much that he was bury'd by Slaves. Nor may we omit the severe Treatment of the thirty Chief Judges, who, on the Accusation of Myro the Phylensian, were banish'd the City; and when any of them dy'd, and were bury'd, their dead Bodies were dug up, and thrown out of the Territories of Attica, as Plutarch reports in the Life of Solon. And indeed, as Isocrates de Jugo says, the People of Athens were so jealous of their Liberty, and held Tyrants in so great Abomination, that when they seiz'd their Estates, they not only demolish'd their Houses, but pursu'd their Hate to their dead Remains, and tore them out of their Graves. Besides, it was permitted to no Man, not even to an Enemy, to go to Sepulchres, except when they attended Funerals. Yet Plutarch, in the Life of Theseus acquaints us, That his Sepulchre was a Place of Refuge, to shelter Slaves and Persons of mean Condition, who fear'd to be oppress'd by the Great, because Theseus had been remarkable for protecting the Injur'd, for assisting the Needy, and redressing their Grievances. But Philip the Macedonian violated the sacred Privilege of Sepulchres, as if, says Livy, he had not been engag'd in War against the living, but dead Athenians, and even against their Tombs. The common Way of burying was by heaping up Earth over the dead Body:
the

the more costly was by keeping it in a Coffin, especially of Marble: but the most sumptuous of all was in a vaulted Cell, in the midst of which the Coffin was plac'd: One of these marble Coffins is still to be seen among the Rarities of the Grand Duke of Tuscany, with the following Inscription engrav'd on it:

ΑΧΙΛΛΕΥΣ ΕΠΑΦΡΑ ΤΗ
ΙΔΙΑ ΓΥΝΑΙΚΙ ΓΕΜΙΝΙΑ
ΜΥΡΤΑΛΗ ΜΝΗΜΝΣ
ΤΕΛΕΥΤΑΙΑΣ ΧΑΡΙΝ
ΤΗΝ ΣΟΡΟΝ ΕΦ Ω ΜΗΔΕ
ΝΑ ΜΗΤΕ ΠΩΛΗΣΑΙ
ΜΗΤΕ ΘΕΙΝΑΙ ΕΞΟΥΣΙΑΝ
ΕΧΕΙΝ ΠΛΗΝ ΕΙ ΜΗ ΤΙ
ΑΥΤΟΣ Ο ΑΧΙΛΛΕΥΣ
ΠΑΘΟΙΗ ΑΝΘΡΩΠΙ
ΝΟΝ ΕΙ ΔΕ ΤΙΣ
ΕΚΒΑΛΗ ΤΗΝ ΜΥΡ
ΤΑΛΗΝ ΔΩΣΕΙ
ΤΩ ΦΙΣΚΩ
α. Β. Φ.

Which is as much as to say: Achilles Epaphra gave this Monument to his dear Wife Geminia Myrtale, for the Sake of her eternal Memory. No Man has the Power to sell it, or to place in it a dead Body, unless the said Achilles in Civility give him leave. But if any one throw out the Body of Myrtale, he shall be fin'd α. α. α. α.

Moreover, it was the Custom of the Athenians to bury their Dead with their Face towards the West; but the Megarensians, on the contrary, interr'd theirs with their Face towards the East: This, whatever Diogenes Laertius by a Slip of Memory says, is asserted by Plutarch, in the Life of Solon, by Eustathius on Homer, Il. T. and by Ælian, lib. 5. cap. 14. and lib. 7. cap. 19. Yet Hireas, the Megarensian, in the Solon of Plutarch, says, That the Megarensians plac'd their Dead turn'd to the West likewise. The Athenians also had a Coffin for each Corps; contrary to the Megarensians, who were wont to bury three or four Bodies in one Coffin. This Custom indeed was sometimes neglected: For we
read,

read, That Syrianus, the Preceptour of Proclus, had, while he was yet living, desir'd of him, that he might be bury'd with him; and for that Purpose had caus'd a Tomb to be made, that would contain two Coffins. But after his Death, Proclus, doubting whether Decency would allow two Bodies to be laid in the same Grave, for some time, deferr'd his Sepulture: upon which the Ghost of Syrianus appear'd to him in his Sleep, and chid him for his scrupulous Delay. Vide Enarratorem in illius vitâ, ex Versione I. Holstenij. Herodotus, lib. 16. says, That they sometimes bury'd their Arms with them: Of this we have an eminent Instance in Plutarch, who, in the Life of Theseus, says, There was found the Coffin of a great Body, and in it a brass Point of a Spear, together with a Sword. And Cimon was bury'd without the City, on one side of the Road, call'd Diacæle, and, beside him, the Mares that thrice had won the Prize at the Olympick Games.

But the Way of Burial, by burning of the Body, requir'd much greater Ceremony, and more laborious were the Preparations in Order to it. I wilfully omit to describe the costly Funeral of Hephestion, the Favourite of Alexander, to which the greatest Part of the World contributed; inso-much that Posterity never has pretended, nor ever will be able, to imitate it. It will be sufficient in this Place to acquaint our Reader, that they first got together a huge Stack of sweet-scented Wood, which, when laid in Order, the Athenians call'd *ῥογὴ νεκρῶν*, the Latines, Rogus, the funeral Pile: This was always built in a quadrangular Form, and equilateral, as we learn from Herodianus: And Homer, in the 18th Iliad, makes the Myrmidons prepare for Achilles a Pile of a hundred Foot in length on every side. It is not unlikely that they were built high for the Great, and low and unadorn'd for the common People. For Funeral Expences became so exorbitant, that the Athenians found it necessary to put a stop to them, and to forbid by a Law the Use of plain'd Wood in the Piles for the Dead: And after their Example, as Cicero, in 2. de Legibus, observes, the Decemvirate forbid the burning of plain'd or polish'd Wood in Funeral Piles: *Rogum asciâ ne polito*: not to mention the Rings, Garlands, number of Minstrels, and other funeral Geer, that were likewise abolish'd by that Legislature: the very Footsteps of which, thro' the Injury, perhaps, of Time, or the never enough to be lamented Negligence of Men, are scarce to be seen at this Day in the Fragments of the Twelve Fables.

When

When they were come to the Ustrina, or Place of Burning, the Funeral Pomp stood still, and the Friends of the Deceas'd coming up to the Body, cover'd it with their Hair, which they either pluck'd or shav'd off in Token of Grief; and with Olive Branches also, which it was held a Crime at Athens to convert to profane Uses: This we learn from Sophocles in Ajax and Orestes: M. Tyrius Orat. 8. and Dion. Hal. l. 11. And here too, as Thucydides acquaints us, Funeral Orations were sometimes pronounc'd, especially at the Burial of Soldiers. Then they were wont to weep over, to give the last Embraces, and to speak to the dead Body; to the End, that if any Sense were remaining after Death, it might at least be sooth'd and delighted with these tender Offices of Love. At length the Relations laid the dead Body on the Top of the Pile, together with the Bier and funeral Ornaments: but whether they unclos'd his Eyes, as Pliny, lib. 10. cap. 37. says, it was the Custom among the Romans, or expected that Mercury should do that Office, is no where expressly deliver'd: Then it was cover'd with the Fat of Beasts, that were slain, and which were also laid on the Pile to be burnt; together with Enemies, Slaves, Horses, Dogs, and Birds, that were likewise kill'd, as also with rich Garments, with Honey, Wine, Gold, Amber, Ointments, their own and their Enemies Arms, and the last and many Gifts of their Friends: insomuch that, according to Plutarch in the Life of Solon, it was thought requisite to put a stop to this vain Prodigality, and to forbid by a Law the sacrificing of more than one Ox, or to throw on the Pile above three Suits of Apparel: And hence, no doubt, proceeded the ridiculous Superstition of burning the rich Household-Stuff of the Deceas'd: And Herodotus, lib. 5. informs us, that Melissa, the Wife of Periander of Thesprotia, on the River Acheron, appear'd after her Death, and complain'd of being cold, because the Garments, that were interr'd with her, not being burnt, were of no service to her: Her Husband therefore stript all the Corinthian Women, who were assembled at the Temple of Juno, and, carrying their Cloaths to the Grave of his Wife, burnt them there, calling on Melissa. Moreover, the Sanctions of the twelve Tables, as mention'd by Cicero, in 2. de Legibus, give just Grounds to believe, that the same Legislatour, prohibited the burning of Gold, which would be of no Advantage to the Dead, and a great Prejudice to the Living, since the scarcity of it would be a hindrance to Commerce.

Commerce. Lucian, de luctu, says, that in their Funerals they sacrific'd sometimes the Horses and Concubines, sometimes the Cup-bearers, of the Deceased : and burnt or bury'd, together with the Body, all their Cloaths and wearing Apparel, as if they were to use and enjoy them in the Infernal Abodes. One of the Relations of the Dead, with a lighted Torch, set Fire to the Funeral Pile ; but turning his Face another way, to witness his Reluctancy to perform that sorrowful Office. The Pile was immediately in a Blaze, the Fuel being in great quantity, and proper to feed the Flame : Mean while they invoc'd the Winds, calling on them to assist the Fire, that the Body, together with the Wood, might be the sooner consum'd : Diodorus Siculus, lib. 5. cap. 2. says, that the Pile of Hercules was burnt in a Moment by Lightning, that flash'd on all sides upon it. And now was the Time, when the Trumpets, in mournful Sounds, gave notice to the Assistants thrice to go round the Pile ; which they did sometimes divided into two Bodies, and meeting in imitation of a Flight. This Ceremony the Greeks call'd *δεδρομή*, and the Latines Decursio, a Joust or Turnament : But the Time of this Jousting in Funerals was different among the Antients : For Homer, Iliad. 23. makes it precede the burning of the Body, in the Funeral of Patroclus, and accompany it in the Funeral of Achilles : Odyss. 15. and sometimes too it follow'd even the Tumulation of the Bones, as we find in Apollonius, Argonaut. lib. 1. They believ'd the Dead to be purg'd of their Offences by this Ceremony ; which nevertheless, according to some, was at first instituted, to divert and sooth the Grief and Wailings of the Mourners, see Statius, Thebaid. lib. 6. and to detain the other Spectatours of the Funeral, that they might not grow weary, and go away : For the Ceremony lasted a considerable Time, and they continu'd long in the open Air, even tho' the Pile was built of a great quantity of Fuel, and that too, apt to burn. Therefore Achilles, in the Funeral even of his dearest Friend, committed what remain'd unburnt at Night, to the Care of the Funeratores, Buryers, who watch'd all the Night, and laid together the Wood of the Pile. And we may observe, that the *δσολογία*, or gathering up of the Bones and Ashes, was deferr'd sometimes to the third Day, tho' I am not ignorant that this Ceremony was most commonly perform'd at the close of the same Day. After the Deflagration, they sprinkled the Pile with old, deep-colour'd Wine, that they might the

more safely tread on the Cinders : For the nearest Relations with their Feet bare, their Gowns ungirdled, and flowing about their Heels, and having first wash'd their Hands, perform'd by Night the last Office of gathering up the Bones. And this Ceremony the Greeks call'd *ὀσολογία*, and the Latines *Offilegium*. And when they found any of them that were but half burnt, and cover'd with Cinders and Ashes, they wet them with Wine, Milk, and Tears ; then wrapt them up in Linnen Towels, and having carry'd them in their Bosom till they were dry, they put them into an Urn, together with the Ashes, with Perfumes, and little Vessels of Tears. Two of which, made of Glass, were lately found in an ordinary Coffin, among the Ruins of a Wall, in the antient Town of Fesulæ, now Fiesoli in Thuscany, and are in the Possession of the Grand Duke. These cinerary Vessels, or Urns, the Greeks call'd *ὀσοθηκαί*, or *ὀσοδοχεῖαι* : and they were not always of the same Form, nor made of the same Matter : For those of Heroes were made of Gold and Silver ; those of the Rich, of Brass or Marble ; and the poorer sort were content with Urns of Earth, or of Wood. When the Remains were put into the Urn, they clos'd it up, cover'd it with a Piece of Purple, or fine Linnen, and then lay'd it in the Earth. Thus we learn from Plutarch, in vita Demetrij, that when the Fleet of Antigonus approach'd the Harbour of Corinth, the golden Urn, in which were deposited the Remains of Demetrius, and that was cover'd with Purple, and had a regal Crown upon it, was discover'd on the Poop of the Admiral-Galley : And a Troop of young Noblemen, and Persons of Quality attended in Arms on the Key, to receive it at Landing ; and Xenophantus, the most fam'd Musician of that Age, began a mournful Song in Praise of the Dead, to which the Rowers with sorrowful Ejaculations made Responses, their Oars all the while, in their Strokes, keeping Time with the doleful Cadences of the Musick : insomuch that the Pomp of his Funeral was no less theatrical than dismal. Nor may we omit to mention the most pious Obsequies, that were paid to Evagoras by his Son Nicocles, and that were remarkable, no less for the great Number and Value of the Sacrifices, than for the Musick, gymnick Exercises, Horse-Races, Galley-Prizes, and the like : For, as Diodorus Siculus, lib. 11. observes, some were so fortunate, as to have their Funerals conclude with Spectacles and Games ; which nevertheless happen'd not to all : but the Athenians, in Gratitude to those,

those, who were slain in the Persian War, besides the Ornaments of their Sepulchres, instituted funeral Games and Exercises, that were perform'd at the Place of Sepulture.

After these sacred Rites were ended, then follow'd the *ψυχάγωγία* • which consisted in calling the Dead thrice by his own Name, bidding him eternally farewell, and praying that the Earth might lie light upon him. And then, being dismiss'd by the Flamen, or the funera Mater, who first sprinkled them thrice with Water, to purge them of the Pollution they had contracted by the sight of the Funeral, they went away. The Word of Dismission, us'd by the Flamen, among the Greeks was, *ἀφ' οὗτος ἔσο* • among the Latines, *Ilicet*. But besides this Lustration by Water, Festus takes Notice of another, that was in use among the Romans, who were wont to walk over the Place of Sepulture: and this manner of Purgation they call'd *Suffitio*, i. e. Fumigation: But whether or no this Custom was practis'd by the Athenians, I have no where observ'd.

The whole Ceremony concluded with the *Περίδειπνον*, as the Greeks call'd it, but the Latines *Silicernium*; which were certain Banquets given by the Parents or Relations of the Dead, wearing Garlands on their Heads; at whose Houses it was permitted to speak in Praise of the Dead, if they had any thing true to say of him; for they held it a Crime to lie on this Occasion, as Cicero acquaints us in these Words: *Sequebantur epulæ, quas inibant Parentes coronati; apud quos de mortui laude, cum quid veri erat, prædicatum; nam mentiri nefas habebatur: ad justa conjecta erant.* De Legib. lib. 2. in calce. The Athenians indeed, as Plutarch, in the Life of Demosthenes says, departed from this laudable Institution; insomuch that at length it grew to a Proverb among them, Praise no Man, not even at a funeral Supper.

They wore black Apparel for the space of seven Days after the Funeral: and to lay aside their Mourning before that Time was expir'd, was held a Breach of Decency. Thus Plutarch, in the Place above-cited, says, that *Æschinus* upbraided Demosthenes, for appearing in publick, gaily dress'd, and with a Garland on his Head, before the customary Week of Mourning was over, laying to his Charge, and accusing him of Hatred to his own Children: Yet Demosthenes only compel'd his private Grief to give way to the publick Joy. These funeral Banquets, as Lucian, de Luctu, teaches, were design'd to sooth and divert the Grief of the

sorrowful Friends and Relations ; whom the Guests were wont to exhort, nay, even to compel, to take some Sustenance, that might refresh their Bodies, that were wasted and grown dry with too long Fasting : For no Man, as that Authour expresses it, takes it amiss in good earnest, that he is compell'd to eat and live. We learn from Pollux, that, at Athens, the funeral Banquet was wont to be given by the chief Managers and Directors of the Funeral, at the House of the nearest Relation : but it is uncertain, whether it was an open Feast, and free to all Comers, like that, which Achilles gave at the Funeral of Patroclus, and those of the Romans, which they call'd Viscerationes, from the great Number of Beasts that were slain, and whose Flesh was distributed among the People.

We will now speak of the many and costly Ornaments of their Tombs and Sepulchres : which some however were wont to prepare for themselves before they dy'd : Cicero, in 2. de legib. says, that the Expence of Sepulchres grew at length to such Excess at Athens, that it was enjoin'd there by a Law, that no more Cost should be laid out, nor more Work imploy'd, on a Sepulchre, than what ten Men could finish in three Days. Nor were they permitted to adorn their Sepulchres with any Pargetting or Fret-Work ; nor to place upon them any Hermæ, as they call'd them ; and which, as they are describ'd by Pausanias in Arcad. were certain Images, ending in a quadrangular Figure, and not polish'd down to the Feet. Besides, they were not allow'd to harangue in Praise of the Dead, except in publick Sepultures : and even then too no other was permitted to speak, but he who was appointed by the Publick so to do : For, according to Diodorus Siculus, lib. 5. it was enacted by a Law, that the chief Rhetoricians only should make funeral Orations, reciting the worthy Actions of those, who were honour'd with publick Sepulture. Now it was Demetrius who set Bounds to, and prescrib'd the manner of, the new Sepulchres : For he commanded, that nothing should be set up on the Place of Interment, except a Pillar, not above three Cubits high, or a hollow Stone, made in the Shape of a little Cistern ; or a square piece of Board, the Care of which he committed to a certain Magistrate appointed for that Purpose. We learn from Plutarch, in Lycurg. and in Isocra. that on the Board were ingrav'd the Name and the Effigies of the Deceas'd : But we may observe, that even in antient Times,
Pillars

Pillars were plac'd on Graves of this Nature : This, Plutarch has taken Notice of from Homer, *Iliad.* π. v. 674.

Ἐνθα ἔταρχ' ὄσσοι κασίγνητοί τε, ἔταυ τε,
 Τύμβω τ' σήλῃ τ', τὸ δ' ἔργον ἐστὶ θανόντων.

His Friends and Kindred here shall him inter,
 And place a Column on his Sepulchre.

We learn from Pollux, lib. 8. cap. 7. that on the Tombs of unmarried Persons there stood the Image of a young Virgin, holding in her Hand a Water-pot, an Urn, or a Basin : and this Image, whether it were one that bore Water, or any other, Isæus call'd *Ἐπυσήμη*. Nor was the Meanness of the Structure ever thought to derogate from the glorious Title of the Trophy, which the grateful Citizens had caus'd to be engrav'd for such as had fought bravely for their Countrey : and Cicero, lib. 2. de Leg. teaches, that the Pillar, on the Sepulchre of the Geometrician, Archimedes, was lay'd upon the Ground. Pausanias, in Atticis, relates, that the Tombs, together with the Pillars, on which were written the Names and Tribes of the Slain, were still to be seen in the Plains of Marathon : and that, in Memory of their Bravery, Sepulchres were erected for them in the very Place, where they fell : tho' it was customary to erect a particular Monument for every one, who was kill'd fighting for his Countrey, either in naval Engagements, or Battels at Land. The Epitaph on those, who fell at Thermopylæ, is recorded by Diodorus Siculus, lib. 11. in these Words : Stranger, tell the Lacedemonians, that we lie here, who obey'd their Commands, and their Captains. Plutarch, in the Life of Aristides, acquaints us, that, in the Battel of Plataea, there fell two and fifty Athenians, all of them of the Tribe Aiantis, which, as Clidemus says, fought very bravely : and that, in Memory of their Victory, Sacred Rites, that had been commanded by the Oracle of Apollo, were perform'd, at the publick Expence, to the Nymphs Sphtagitides : but they were bury'd in the Way, that leads to the Academy, and square or flat-sided Pillars were plac'd upon their Tombs, with Inscriptions, declaring the Name of each of them, and the Ward or Precinct where he liv'd : Nor may we forget that most equitable Law made by the People ; which decreed the Honour of publick Sepulture to such Servants and Slaves, as had bravely and faithfully serv'd

serv'd their Masters in Battel ; and that their Names should be ingrav'd in Columns, to be set up over their Place of Burial : It can not indeed be doubted, but these were honorary and empty Sepulchres ; unless, before the Elation of the Body, a Finger, or, after the burning, some Bone of it, were purposely taken, and kept to be bury'd in the native Countrey of the Deceas'd. And hence we see the Reason, why the Decemviri, who, as they did perhaps in almost all Things else, imitated the funeral Rites of the Athenians, dispens'd with the Ceremony of the *Offilegium*, or gathering up the Bones, when any one dy'd in foreign Wars. And that the Greeks had their *Κενοτάφια*, or empty Sepulchres can be doubted by such only, as are ignorant of the Piety of the Corinthians to the Argives, that were slain at Troy ; of which Pausanias in Corinth. and of the great Cenotaphium, mention'd by the same Authour in Atticis, that was made at Athens for Soldiers, whose Bodies were not found : not to mention the famous Cenotaphium of Cyrus, recorded by Xenophon in the sixth Book of his Expedition ; nor the Sepulchre of Euripides, in the Way that led from the Pyræus to Athens ; tho', as Pausanias in the Place above-cited witnesses, Euripides went to Archelaus in Macedonia, and was bury'd there : But this Difference may be observ'd ; That the honorary Sepulchres of Soldiers, who were kill'd in a naval Engagement, were mark'd with the Emblem of Rudder, or of an Oar, as that of Elpenor was in Homer *Odyss.* 12. but the rest had no Mark of Distinction : tho' I am not ignorant, that, besides the Inscriptions, Emblems were likewise put on most Monuments : as a Globe and Cylinder on that of Archimedes, (Cicero in *Tuscul.*) a Dog on that of Diogenes, (Laertius in *ejus vita*) a Ram on that of Isocrates, (Plut. *Rhat.* 10.) and Owls very frequently, as we learn from Athenæus, lib. 13. to say nothing of the Sepulchral Statues, with which the Monuments of the Rich were adorn'd : as we find in Lycophron. in Pindar *Od.* 10. Nem. in Plato, 12. de *R. P.* and in others. Nay, even on that of Æsop, tho' but a Slave, the Athenians plac'd a great Statue, that all might know, says Phædrus, that the Way of Honour lies open, and that Glory is due, not to the Race, but to Virtue :

Ingentem

Ingentem statuam posuere Attici,
 Servumque collocârunt æternâ in basi,
 Patere honoris scirent ut cuncti viam,
 Nec generi tribui, sed virtuti, gloriam.

Moreover ; the Athenians, when any of their Relations were murder'd, always carry'd a Spear with the dead Body to the Place of Sepulture : and this Spear they stuck into the Tomb, as a Token, that they denounc'd Vengeance to the Murderers : This we learn from Suidas : And the Scholiast on the Clouds of Aristophanes teaches, That after the dead Body was carry'd forth to Burial, it was the Custom for the Relations and Friends of the Deceas'd to wash themselves by way of Purgation. Then they renew'd afresh their unavailing Tears and Wailings ; while Libations and the funeral Supper were brought to the Sepulchre : about which they believ'd the Manes of the Deceas'd to be always hovering ; and that their Senses still remaining alive, they wanted Nourishment, and were delighted and sooth'd with these Offices of Tendernefs and Love. For these Reasons too they instituted their *ἑνδάλια*, as the Greeks call'd them, but the Latines Novendialia, which were certain Sacrifices us'd for nine Days after the Parry was dead. The Manner of them was this. About Sun-set, being apparell'd in Black, they pour'd Liquors on the Coffins or Urns : these Liquors were Honey, Milk, Wine, Water, Blood, Ointments and Tears : mean while they encompass'd the Monument with Garlands of Parsley and Myrtle. But as we learn from Plutarch, in Quæst. Græc. the Encnisma of the Argives was more full of Ceremony. For the Custom among them was, when any of them had lost a Friend or Relation, immediately after the Funeral, to sacrifice for thirty Days together to Apollo, and then to Mercury : for they believ'd, that in like manner as the Earth receives the Bodies of the Deceas'd, so Mercury does the Souls. To the Priest of Apollo they gave Barley, and receiv'd from him the Flesh of the Victims : they extinguish'd the Fire that had burnt the Body, because they held it to be polluted ; and kindled other to dress the Flesh, which they call'd Encnisma. Meursius, and others of the Learned observe ; that if it was a Man or a Woman that was dead, then the Water was brought by Women, whom they call'd *ἑγχυστρίσπαι* : if a Batchelour or a Virgin, then that Office was committed to some Boy, who was related

related to the Deceas'd. And Libanius, in Progymn. takes notice, that Achilles acted not according to the Custom of the Greeks, in offering human Blood to appease the Manes of the Dead ; and that he injur'd his own Reputation, and the Memory of his Friend Patroclus by that cruel Practice, which he had learnt from Barbarians, of burning, together with the Pile, the Bodies of Men, as well as of other Animals : for which he is blam'd by Homer, as Plutarch, de Homer. observes. Iphigenia, in the Electra of Euripides, provides herself with the Blood of Mountain Sheep and Heifers ; not, like him, of Enemies, butcher'd on the Pile. And indeed, as Libanius in Progymn. takes notice, an Enemy, taken Prisoner, ought no longer to be accounted an Adversary, since the very Victory changes his Name, and of an Enemy makes him be call'd a Suppliant. I now return to the Athenian Ceremonies.

They likewise strew'd the Ground around the Monument with Flowers of all sorts, but chiefly with Roses, Amaranths, Lillies, Poppies and Violets : with which they dress'd up likewise the Dish, that was design'd for the Funeral Banquet. Ovid, in Fast. lib. 3. enumerates the several sorts of Viands, they were wont to eat in these Ceremonies ; and so too does Lucian, de Luctu ; and the same Authour in Dialog. Char. deriding the Customs of his own Age, says, That they crown'd with Garlands the Stones of the Monuments, and anointed them with rich Ointments, and that some were wont to raise a Pile before the Monuments, and, digging a Grave in the Earth, threw in their costly Dishes, and pour'd in a great Quantity of Wine.

The Athenians celebrated these Parentations in the Month Antesterion, says Hesychius ; and the Romans, as we learn from Ovid. Fast. lib. 2. observ'd almost the same Time in the Celebration of theirs : for it was the Custom among them to appease the Manes of their Parents and other Relations, on the eleventh of the Calends of March. This Ceremony began very early among the Athenians, as Lysias in Or. teaches : and that they were enjoin'd by a very antient Law yearly to deplore their bury'd Friends : and on the same Day to praise in a publick Oration those that had been slain in Battel, as Cicero, in lib. de Orat. teaches. And Plutarch in the Life of Theseus informs us, That, on the eighth of their Month Pyanepsion, which was the Day he return'd with the young Men from Crete, they perform'd their chief Ceremony in Honour of him ; and that they worship'd

worship'd him likewise on the eighth Day of each of their other Months: The like Testimony of Gratitude was shewn to the Greeks, who were slain by the Medes, and bury'd at Plataea, says Thucydides, lib. 3. in Orat. Plataen; of which Plutarch in the Life of Aristides, gives the following particular Account: The Plataeans, says he, are wont to offer yearly Parentations to the Greeks, that fell in the Batel, and were bury'd there, which Custom they continue even to this Day, in the ensuing Manner: On the sixteenth Day of the Month Maimacterion, which with the Boeocians is Alalcomenus, they make their Procession, which, beginning by Break of Day, is led up by a Trumpeter, sounding a Point of War: then follow certain Chariots, loaden with Myrtle and Garlands; and after them is led a black Bull: Next come the young Men, of free Birth, carrying Libations of Wine and Milk in large two-ear'd Vessels, and Jars of Oil and pretious Ointments: Nor is it permitted to any of servile Condition, to have the least Hand in this Ministration; because the Men, that were bury'd there, dy'd in Defence of their Liberty. After all comes the chief Magistrate of Plataea, who, tho' it be unlawful for him at other Times, either to wear any manner of Arms, or to be cloath'd in any other colour'd Garment than white, is at that Time nevertheless apparel'd in a purple Robe; and, taking a Water-Pot out of the City-Chamber, proceeds, bearing a Sword in his Hand, thro' the middle of the Town to the Sepulchre: then, drawing Water out of a Spring, he washes, and anoints the Pillars of the Monuments; and, sacrificing the Bull upon a Pile of Wood, and making Supplications to Jupiter, and to Mercury of the Earth; he invites those valiant Men, who perish'd in the Defence of Greece, to the Banquet and Parentations: After this, filling a Bowl with Wine, and pouring some of it out by Way of Libation, he drinks the rest, and says, I drink to those Persons, who lost their Lives for the Liberty of Greece. These Solemnities, even to this Day, do the Plataeans observe. Thus far Plutarch.

Nor may we in this Place omit the Great Honours, that the Republick of Syracuse decreed to Timoleon: whose Bier being laid upon the Pile, Demetrius, the loudest-mouth'd of all the Cryers of those Days, recited a written Decree to this Purpose: The People of Syracuse have decreed, that this Timoleon, the Son of Timodemus of Corinth,

rinth, shall be bury'd at the publick Expence; that two Hundred Minæ shall be expended on his Funeral, and moreover, that he shall be for ever honour'd with musical, equestrial, and gymnick Games and Exercises: because, having pull'd down the Tyrants, overcome the Barbarians, rebuilt the large Cities, that were demolish'd, and render'd them again populous, he restor'd to the Sicilians their antient Laws and Liberties. We learn from the Scholiast on the Frogs of Aristophanes, that the particular Time, when these annual Solemnities were perform'd to the Dead, was about Noon: but that even then they were scarce safe from the Spectre of Empusa, that by various Arts disturb'd the Ceremonies. The Stories, that are told of Procus Lycius, by his Flatterer Coelius Rhodoginus, lib. 6. cap. 28. are made up of nothing but Superstition and Hypocrisy: For he tells us, that that blessed Man, as he calls him, was more knowing in, and a more zealous Observer of, the Rites and Ceremonies, that are pay'd to the Dead, than any other Man whatever: for he never omitted at any time to perform that Religious Duty: but went yearly on certain Days to the Sepulchres of the Attick Heroes and Philosophers; and of all others, with whom he had had any Friendship and Familiarity, and offer'd the due Sacrifices to them, not by the Help and Ministry of others, but by himself, and with his own Hands. Then after he had paid these Rites to each of them, he went to the Academy, where he appeas'd by Sacrifices the Souls of his Ancestours, and of all his Relations, in one Place: and in another he perform'd the like Ceremonies to the Souls of all the Philosophers: And more than all this, that most religious Person sacrific'd in a third Place to the Souls of all the Dead. And these pious Offices arose at length to such a Height of Superstition, that the Athenians, not satisfy'd with paying these Honours to such as had deserv'd well of the Republick, recorded their Names among the Number of their Gods; and decreed them divine Honours, as we learn from Aristophanes in Equitib. and Pausanias in Atticis. Nay, it escap'd very narrowly, that Alexander was not worship'd at Athens as a God: for we learn from Plutarch, in Orat. Lycurg. that Adulation would have prevail'd, and brought that infamous thing to pass, had not a prudent Person prevented it, by scoffing at the Populace, and asking them in a jeering Manner, What a God, said he, will this be, into whose Temple whoever goes

goes is polluted, and whoever comes out needs Purgation ?
Thus we see, how much the Athenians departed from their
antient Rites of Funeral, and what Corruption of Manners
crept into the Territories and City of Athens, during the
Time of this raging Pestilence.

But, as the state of Things would then permit,
Men burn'd their Friends, nor look'd on just, and fit :
1250 And WANT, and POVERTY did oft engage
A thousand Acts of VIOLENCE and RAGE ;
Some, O imperious WANT ! a CARCASS spoil,
And burn their Friend upon anothers PILE ;
And then would strive, and fight, and still defend,
1255 And often rather die, than leave their FRIEND :

The

NOTES.

1249. Nor look'd on Just and fit :] Boccace, that Parent of the Tuscan Eloquence, describes almost the like Neglect and Disorder, that happen'd even in a Christian Countrey, in the Burial of those that dy'd of the Plague at Florence in the Year 1348. and tells us, that few Bodies were accompany'd to their Graves by more than ten or twelve of their Neighbours : and those too were not of the better sort of Citizens, but only a Parcel of Mob, that for Hire, carry'd the Body, not to the Church where the dead Person, before his Death, had desir'd to be bury'd ; but, for the most Part, to that which was next at hand ; preceded only by four, or six Priests at most, with few, and sometimes with no Lights at all, and threw it hastily into any Grave they found empty, or that had Room to receive it. But let us hear how movingly he describes this Calamity in his own Words. Et erano radi coloro, i corpi de i quali fosser' più che da un' dieci, o dodici de suoi vicini alla

chiesa accompagnati, de quali non gl' horrevoli, e cari cittadini, ma una maniera di becchiamorti sopravvenuta di minuta gente, che chiamar si facevano Becchini, la quale questi scrupigli prezzolata faceva, sottrattavano alla bara, e quella con frettolosi passi, non à quella chiesa, che esso aveva anzi la morte disposto, ma alla più vicina, le più volte il portavano, dietro à quattro, o sei clerici con poco lume, e tal fiata senz' alcuno, li quali con l' aiuto di detti Becchini, senza fatigarfi in troppo lungo ufficio, o solenne, in qualunque sepultura disoccupata trovavano, più tosto il mettevano. J. Boccaccio, in Proem. Decam.

1254. And then, &c.] Thus too Ovid, who has most happily imitated both Thucydides and our Authour :

Ante sacros vidi projecta cada-
vera postes ;
Ante ipsas, quo mors foret in-
vidiosior, aras :
Pars animam laqueo claudunt,
mortisque timorem

The other lost his PILE by pious THEFT ;
A poor Possession ! all that FATE had left.

NOTES.

Morte fugant, ultroque vocant
venientia fata :

Corpora missa neci nullo de more
feruntur

Funeribus : neque enim capiebant
funera portæ ;

Aut inhumata premunt terras,
aut dantur in altos

Indotata rogos ; & jam reverentia
nulla est ;

Deque rogis pugnant, alienisque
ignibus ardent :

Qui lacryment desunt, indeflectæque
vagantur

Natorumque, virumque animæ,
juvenumque, senumque :

Nec locus in tumulis, nec sufficit
arbor in ignes.

Metam. lib. 8.

Which a late ingenious Person
has thus render'd :

Death stalk'd around with such
resistless sway,

The Temples of the Gods his
Force obey ;

And Suppliants feel his Stroke,
while yet they pray.

The rest, grown mad, and frantick
with Despair,

Urge their own Fate, and so prevent
the Fear :

Strange Madness that ! when
Death pursu'd so fast,

T' anticipate the Blow with impious
Haste.

No decent Honours to their Urns
are pay'd ;

Nor could the Graves receive the
num'rous Dead :

For, or they lay unbury'd on the
Ground,

Or, unadorn'd, a needy Fun'ral
found :

All Rev'rence pass'd, the fainting
Wretches fight

For fun'ral Piles, that are another's
Right :

Unmourn'd they fall ; for who
surviv'd to mourn ?

And Sires, and Mothers, unlamented
burn :

Parents and Sons sustain an equal
Fate ;

And wand'ring Ghosts their kindred
Shadows meet :

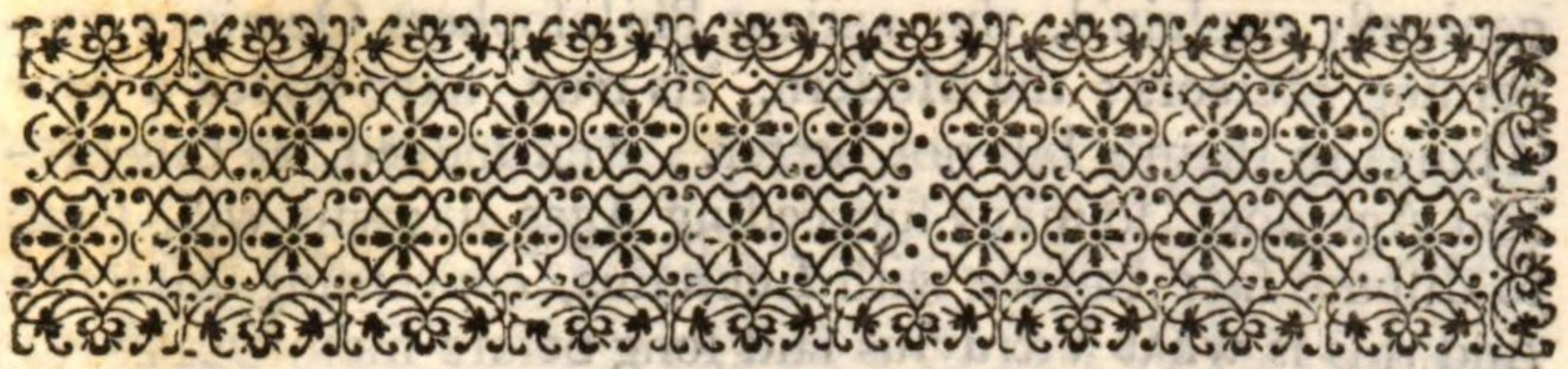
The Dead a larger space of
Ground require ;

Nor are the Trees sufficient for
the Fire.

All which Calamities may the
Almighty avert far from us ;
and not from us only, but from
the universal Society of all Mortals :
Nor let us uncharitably
join in Wishes with the heathen
Poet, who sings,

Dii meliora piis, erroremque
hostibus illum.





ANIMADVERSION,

By Way of

RECAPITULATION,

On the Sixth Book of

LUCRETIVS.



IN this Book Lucretius reasons of many Things excellently well, but has miscarry'd in his main Design, and does not so much as stagger the Belief of divine Providence, which he attacks with his utmost Force: For let it be granted, that the Causes he assigns of Meteors are perspicuous and true; that he has rightly explain'd the reason of Thunder, Lightning and Earthquakes; in a Word, that all things proceed from natural Causes, and are continu'd and carry'd on by them: yet there is no Nature without a Lord, nor does she herself at least reject or disown a Ruler. For Nature is only that Disposition and Order of the Particles of senseless Matter, which is the Cause of these Effects, we call natural: Now if that Disposition was introduc'd by Chance, it does not confute and overthrow Providence; and if it was the Work of Reason and Wisdom, it confirms it. Therefore these Explications may amuse and delight natural Philosophers; but they can not in the least avail Atheists.

No

No Man has more accurately collected, none more ingeniously explain'd, the antient Philosophers Opinions concerning Meteors: the Modern, 'tis true, have added a few Things to them; but not better. And indeed, as this present Age does, so many succeeding Ages likewise will, seem to dispute face to face with Lucretius, concerning Meteors. And this is what Vitruvius said long before me.

What he teaches of Earthquakes, and of the Sea is so rational, that the Things themselves approve and confirm his Doctrine: only there are some Earthquakes that seem to surpass the Strength of the Causes he assigns them.

Ætna is a noble Subject, but difficult: and in this the Poet flags a little. But then he reasons of the Increase of the Nile, of the Averni, and of the wonderful Fountains, as if Truth itself were speaking: But it may be observ'd that he does not give full Satisfaction concerning the fabulous Spring of Jupiter Ammon: for Lucretius always explains Nature better than Fables.

He would have written more at large of the Loadstone, and have left us many Things that we should read with Pleasure, if the wonderful Power of that Stone had been known in his Days. The Explication he gives of Plagues and Diseases is pertinent and useful: And lastly he interprets Thucydides in such a manner, that he expresses the Energy, and surpasses the Majesty, of that Historian: Nor is the Narration of Thucydides so clear, or set off with so much Brightness of Wit.

The END of the Sixth Book.





Alphabetical C A T A L O G U E of the Names of the Authours, as well Antient as Modern, cited in the N O T E S on Lu- cretius.

R
A B B I Isaac A-
barbenel.
Abraham Aben Ez-
ra, or Aven-Hesre.
Achilles Tatius.
Acron.

Mr. Addison.
Adrianus Romanus.
Ælian.
Æschines.
Æschylus.
Agricola.
Alaricus.
Albategnius, or rather Albatta-
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Anacreon.
Anastafius Sinaita.
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Antipater.
Apollonius Rhodius.
Appianus Alexandrinus.
Apuleius.
Aquinas.
Aratus Solensis.
Aristotle.
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Arnobius.
Asclepiadius.
Athenæus.
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Autumnus.

B
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Bassus.

Beda.

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 Boccace.
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 Bonincontrius.
 Alphonfus Borellus.
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C

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 Calisthus.
 Callimachus.
 Campanella.
 Canaparius.
 Julius Capitolinus.
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 Cartesius, or Des Cartes.
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 Julius Cafferius.
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 Cedrenus.
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Columella.
 The Commentatour on Ulegh
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D

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E

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F

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G

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G

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Galen.
Galileo.
Garzone.
Gassendus.
A. Gellius.
Geminus.
Germanicus.
Gifanius.
Gulielmus Gilbertus.
Giraldus.
Glanville.
Gliffonius.
Golius.
Golizius.
Gorgias Leontinus.
Gorlæus.
Gratius.
Gregorius Nazianzenus.
Gregorius Nyffenus.
Grotius.
Gronovius.
Janus Gruterus.
Otto de Guerrick.
Melchior Guilandinus.
Gulielmus, Tyrensis Pontifex.
Gutherius.
Guyotus.

H

Hadrianus Cardinalis.
Heinfius.
Hermes Trismegistus.
Herodotus.
Hesiod.
Hesychius.
Hevelius.
Hierocles.
Hilarius.
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Hobbes.
Homer.
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Hortenfius.
Horus Apollo,
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Hudibras.
C. Julius Hyginus.

J

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St. Jerome.
Josephus.

Ifidorus.
Isocrates.
Ittigius.
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Junius.
Justin.
Juvenal.

K

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Kircher.

L

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Langius.
Lee.
Levinus Lemnius.
Livy.
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Lomeierus.
Longinus.
Longomontanus.
Georgius Longus.
Lucan.
Lucian.
Lucilius.
Lycophron.
Lycoſthenes.

M

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Hieron. Magius.
Joannes Magnus.
Olaus Magnus.
Maldonet.
Mamertus.
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Manutius.
Picus Mirandola.
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Martial.
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Maximus.
Pompon. Mela.
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N

Na-

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Nemefianus.
Nicianus.
Niger.
Nigidius Figulus.
Nonius.
Nonnus.

O

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Oppian.
Origen.
Orosius.
Orpheus.
Ovid.

P

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Panvinus.
Pareus.
Passeratius.
Velleius Paterculus.
F. Paulinus.
Paulus Alexandrinus.
Paulus Venetus.
Pausanias.
Perfius.
Petavius.
Petitus.
Petronius Arbiter.
Petrus Peregrinus.
Philippus Thomafinus.
Philo Judæus.
Phocas.
Philoponus.
Photius.
Pincierus.
Pindar.
Pineda.
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Pireskius.
Plato.
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Plotinus.
Plutarch.
Julius Pollux.
Polybius.
Alexander Polyhiflor.
Pompeius Lernaëus.
Pontanus.
Porphyrius.
Baptista Porta.

Possidonius.
Procopius.
Propertius.
Prolegom. in Bibl. Polyglott.
Prosper Alpinus.
Prudentius.
Ptolemæus.
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Q

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Quintilian.

R

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Antonius Maria de Rheitha.
Dr. Ridley.
Mr. Rowe.

S

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Sir George Sandys.
Santorellus.
Fortunatus Scacchus.
Julius Cæsar } Scaliger.
Joseph }
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Schioppius.

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Scribonius Largus.
Sebedius.
Selden.
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Servius.
Shakespear.
Sir Edward Sherburne.
Sigonius.
Silius Italicus.
Sipontinus.
Solinus.
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 Stobæus.
 Strabo.
 Suarez.
 Suidas.
 Suetonius.
 Symmachus.

T

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 Terence.
 Torquato Tasso.
 Tertullian.
 Theocritus.
 Theon Alexandrinus.
 Theophrastus.
 Theophylact.
 Thucydides.
 Tibullus.
 Tiraquel.
 Tremellius.
 Tristan.
 Turnebus.
 Tzetzes.

V

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Varro.
 Ubbo Emmius.
 Vegetius.
 Verrius.
 Aurelius Victor.
 P. Victorius.
 Mattheo Villano.
 Virgil.
 Polydore Virgil.
 Hieronymus Vitalis.
 Vitruvius.
 Volaterranus.
 Vomanus.
 Gerrard-Joan. }
 Isaac } Vossius.
 Urfinus.

W

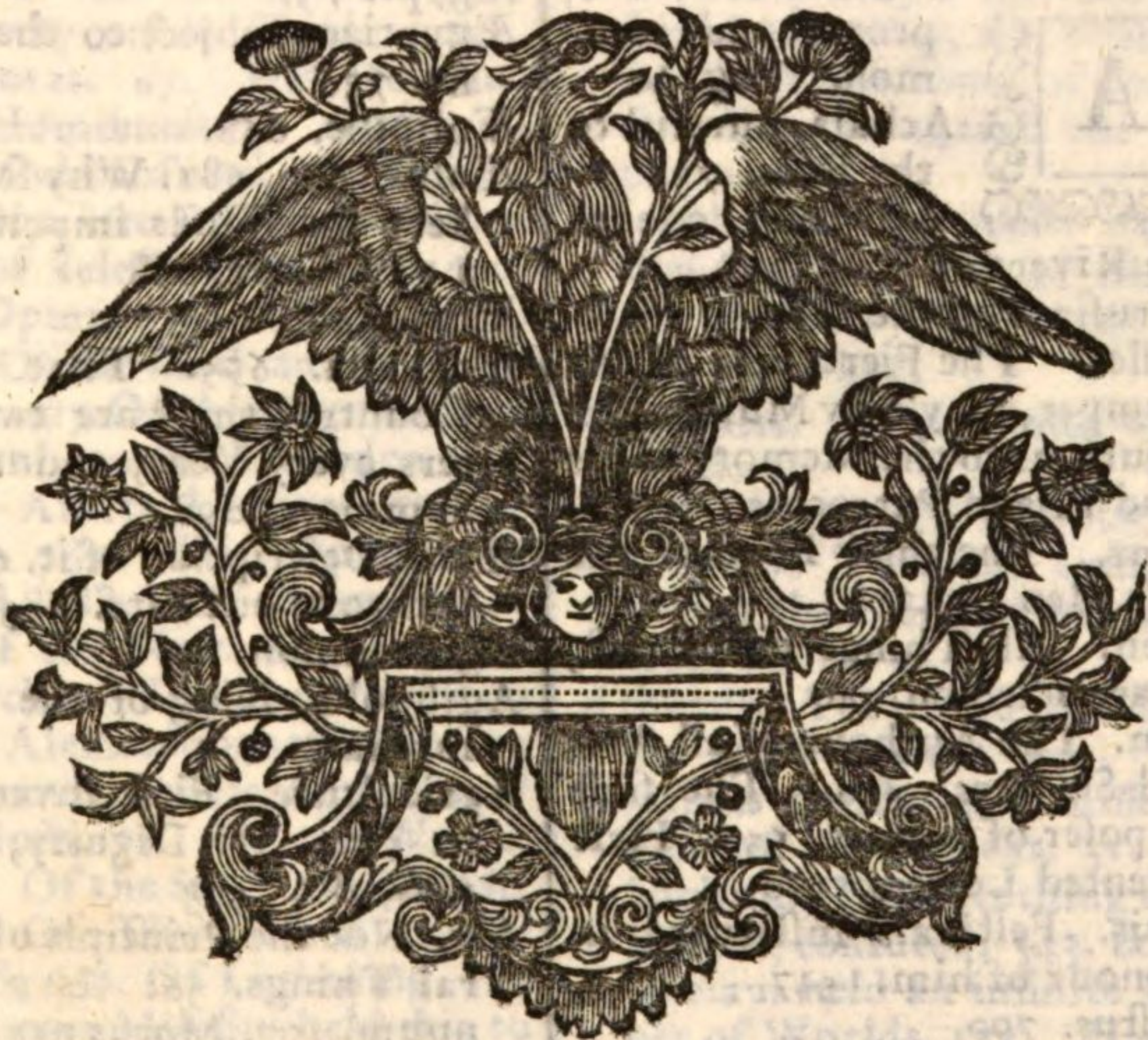
Waller.
 Wendelinus.
 Wowerus.

X

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Z

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